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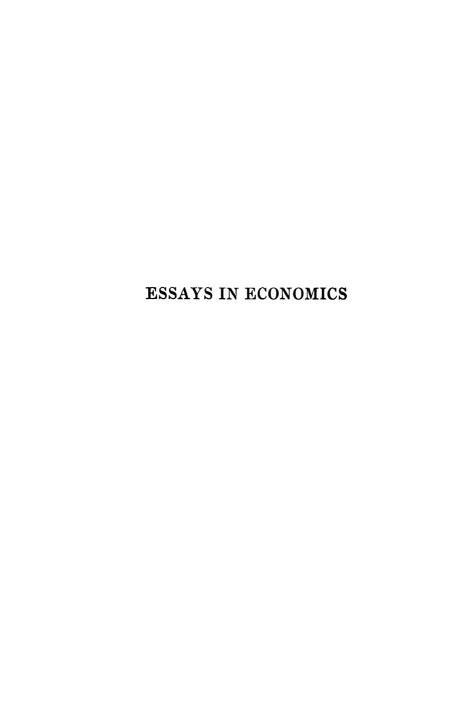
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ESSAYS IN ECONOMICS

BY

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PREFACE

In the course of an academic and literary career exceeding four decades there are naturally apt to accumulate a series of minor contributions. Some of these have been incorporated in the various books which it has been my fortune to write. There remain, however, a large number not so utilized; and among them some which all too complaisant critics have thought of perhaps more than mere ephemeral interest. I have, therefore, deemed it appropriate to make a selection from these scattered writings, and to let some of them at least appear in two volumes. As they deal with distinct classes of topics, they are published with independent titles—the present volume and the companion volume, Studies in Public Finance.

The contributions to the present volume are composed of essays in scientific journals, of addresses and lectures, of chapters in jointly edited books and of reports by government commissions. It would have been easy to add a third volume, composed of reviews of literature, as Professor Edgeworth has recently done; but it seemed wiser not to attempt this. The chapters in the present volume fall naturally into three divisions: contributions to the history of economic doctrine, comprising the first four chapters; problems of economic theory, such as chapters five, seven, nine and ten; and questions of economic policy like chapters six, eight and twelve. To these I have ventured to add in chapter eleven a popular lecture; and in the two final chapters addresses of a more general educational import.

In contributions which range over so long a span of time there are obviously two hazards. One is the danger of repetition. This I have sought to reduce to a minimum by omitting those writings which seemed in any considerable degree to duplicate what is contained in the present chapters. The other is the risk of contradiction which not infrequently marks the development of an individual's thought with the progress of time and with the at-

tainment of what is presumed to be a riper wisdom. While it is true that the contributions of some forty years ago may appear somewhat archaic, they have seemed to be worth preserving, perhaps as an illustration of the stages in a scholar's mental development. In the fundamental points discussed in the earlier and the later contributions, however, there will be found, I trust, only those discrepancies which inevitably attend such a series of more or less unrelated productions.

The chapters appear substantially as originally composed. No attempt has been made to bring them down to date, as this would have virtually necessitated a complete rewriting. In only a few instances have any additions or comments been added, and these always appear in brackets, as is true likewise of the prefatory lines of introduction to each chapter.

EDWIN R. A. SELIGMAN.

Columbia University October, 1925.

CONTENTS

	CHAPTER I	
Conti	NUITY OF ECONOMIC THOUGHT	PAGE
1.	The Earlier Views	2
2.	The Eighteenth Century	7
3.	The Classical School	11
	The Reaction	15
	CHAPTER II	
OWEN	and the Christian Socialists	
1.	Robert Owen	23
12 .	The Founders of Christian Socialism	31
, 3.	Christian Socialism	38
.4.	Socialism and Co-operation	44
5.	Conclusion	56
	CHAPTER III	
Ov. So	ME NEGLECTED BRITISH ECONOMISTS	
1.	The Earlier Writers	65
2.	The Contemporaries of Ricardo	70
3.	The Value Theorists	81
4. 5.	The Critics	95 111
Э.	The Marginalists	111
	CHAPTER IV	
Econo	MICS IN THE UNITED STATES: AN HISTORICAL SKETCH	
1.	The Colonial Period	122
2.	The Close of the Eighteenth Century	127
3.	The Nineteenth Century to the Civil War	134
4.	The Post-Bellum Decade	145
5 .	The Modern Schools	148
	CHAPTER V	
An Ec	ONOMIC INTERPRETATION OF THE WAR	
	Nationality and Economics	162
	The Stages in Rivalry	170
2.	The Probable Future	
1 3.	vii	110

CONTENTS

CHAPTER VI

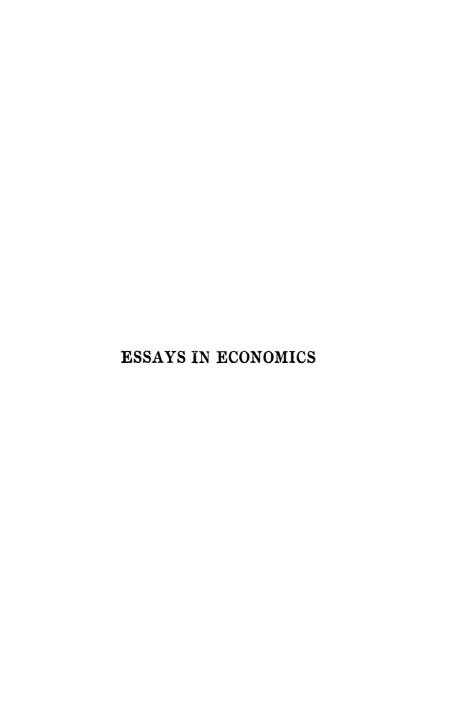
PAGE

RAILWAY TARIFFS AND THE INTERSTATE COMMERCE	LA	w					
1. General Considerations							180
							192
3. The Short-Haul Principle							207
							219
•			•	•	•	•	227
6. Other Forms of Competition			•	•		•	242
7. The Interstate Commerce Commission.			-	•	•	•	251
Appendix. The Theory of Joint Costs	•	• •	•	٠	•	•	262
CHAPTER VII							
THE CRISIS OF 1907 IN THE LIGHT OF HISTORY							
1. Crises in General							266
2. The Crisis of 1907			•		•	•	274
CHAPTER VIII							
-THE IMMIGRATION PROBLEM							
1. Immigration in the Past							280
2. The Arguments							284
CHAPTER IX							
Economics and Social Progress							
1. Introduction							289
'2. The Influence of Economic Life	-		-	-			2 92
3. The Lessons of Economic Interpretation	•		•	•	•	•	2 95
CHAPTER X							
SOCIAL ASPECTS OF ECONOMIC LAW							
1. The Social Point of View							304
2. Application to Public Finance							311
3. Conclusion							322
CHAPTER XI							
THE ECONOMIC PROBLEMS OF THE MODERN DENTI	Q.T						
							325
1. Earnings	•	• •	•	•	•	•	331
3. Savings	•	• •	:	:	:	•	335
	•		·	•	٠	٠	•
CHAPTER XII							
THE SOCIAL EVIL							
1. The Policy of Regulation	•	• •	•	•	•	•	342
2. The Page Law	•		•	•	•	•	346

		CHAP	TEF	R X	III									PAGE
THE F	EAL UNIVERSITY													FAGE
1.	The Spirit of the	Universit	ty.											352
2.	The Form of the	Universit	ty.			•	•	•	•	•	•			358
		CHA	PTE	R I	ΧIV	7								
Тне А	MERICAN ASSOCIATIO		VERS	ITY	PR	OFE	880	RS-	-IT	s A	IM	S A	ND	
1.	The College and	the Unive	ersity	٠.										364
	University Rights													372
3.	University Duties													379
4.	Conclusion													382

CONTENTS

ix



ESSAYS IN ECONOMICS

CHAPTER ONE.

CONTINUITY OF ECONOMIC THOUGHT.

[This was originally published as a contribution to the volume, Science Economic Discussion, New York, 1886, referred to below, p. 150.]

"It is incontestable," says Comte, "that continuity and fecundity are the least doubtful symptoms of all truly scientific conceptions. When each new work on political economy, in lieu of presenting itself as the spontaneous sequence and gradual development of previous works, has an essentially personal character according to its author, so as repeatedly to put in question the most fundamental notions," then we can rest assured that we are not dealing with a science properly so called.

It is not the intention of the present essay to combat this statement in its entirety; for the maturer judgment of the scientific world has convicted Comte of a gross misconception as to the nature of economics. But one charge must be met,-a point that contains the very marrow of the new movement in political economy. What Comte predicated of sociology, but denied in speaking of political economy, and what many of the older school then, as now, often disregarded, is the essential interrelation between economic theories and the changing external conditions of industrial life. The modern school, the historical and critical school, holds that the economic theories of any generation must be regarded primarily as the outgrowth of the peculiar conditions of time, place and nationality under which the doctrines were evolved, and that no particular set of tenets can arrogate to itself the claim of immutable truth, or the assumption of universal applicability to all countries or epochs. We do not wish to disparage the work of previous economists; but, just because

of our belief in the relativity and continuity of economic doctrine, we are compelled to regard much of what was at the time comparatively correct and feasible, as to-day positively erroneous and misleading. We maintain that Comte's criticism is specious and shallow; we hold that there is a well-defined thread of continuity and gradual development in the history of economic doctrines; and we assert that each period of economic life must be treated by itself, both in regard to the truth or falsity of the doctrine itself, and in regard to the applicability of the particular theory in question. Let us, then, first give a short sketch of the history, and then draw our conclusions.

1. The Earlier Views.

The science of political economy in its present form is essentially a creation of modern thought. The conditions that have given rise to its birth are peculiarly the development of the last few centuries. Classic antiquity can indeed show us several writers on economic topics; but a complete science, as we understand it, was an impossibility, because the whole environment was of a nature to preclude speculation of this kind. The one great fact which pervaded the whole national life in Hellenic antiquity, for instance, was the institution of slavery. In Greece at the time of Pericles the home of almost every rich freeman was a great complex. He owned the land, the house, the slaves; and he produced at home, on the premises, many of the necessary articles of consumption, which again, in cases where an active trade had developed, were taken to market by his own slaves, and sold as his own property. This complex of possessions was called in Greece oikos (originally, "a house"), and the word "economics" (οίκος and νομός, "rule") primarily denoted the method of managing this property, thus including domestic as well as political economy. But there was no fundamental distinction, as in modern times, between real and personal property, between movables and immovables, between land and capital, because the same individual largely owned both. There was no distinction between labour and capital, because labour was regarded as a part of capital, because the labourer was property, because the slave was put in the same category as land and other

commodities. Land-owner, capitalist, employer of labour, who are to-day sharply distinguished in production, were thrown into one in that period of classic antiquity when speculation arose. The slave being a part of this complex, no independent theory of wages could arise, since there were no wages; the landowner being the capitalist, no theory of rent could arise; the capitalist being the employer of labour and the transporter of goods to market, no theory of interest and profits, no conception of wages of superintendence as a separate share in distribution, could arise. The o theory is therefore a fact of fundamental importance in the Greek life of the fifth and fourth centuries, and furnishes the clew to many of the theories of Aristotle and Xenophon which, without it, are incomprehensible.

The second distinguishing mark of Greek life was the general conception of state. The present century is the age of individualism: the Hellenic epoch was what might be called the age of collectivism. There the state reigned supreme: the individual as such was swallowed up. His time, his property, his life, belonged in the last instance to the state, which might demand them at any time. The only occupation worthy of a full citizen was that of attending to public affairs. Statecraft and politics, athletics and military exercises, engrossed the chief moments of every Grecian, and left him neither time nor inclination for the pursuit of manual labour. (This conception of the state was perhaps carried to an extreme in Sparta, where, as is well known, the meals were eaten in common, the children educated together under the superintendence of the state, and the marriage relation subordinated to considerations of imagined political necessity.)

In Rome the matter was not far different. Although Rome went through a thousand-year development, the economic conditions even in the plenitude of her power never attained the stage reached by modern countries; the capitalist or factory system was unknown; and the ideas, even as advanced in the code of Justinian, bear evidence of the incomplete development of economic theory. Slavery, the absence of industrial capitalism, the low estimation of manual labour, and imperial absolutism, were the distinguishing characteristics of national life; and under such conditions an economic science in the modern sense was rendered impossible. The Romans, however, had their

Physiocratic school, during the empire, in the shape of the agrarian writers,—scriptores de re rusticâ, such as Varro, Columella, and others,—who attempted to stem the tide of national decay, and to recall the Romans to a sense of their former strength, by sounding the praises of agriculture, and by proving the economic as well as moral shortcomings of the system of servile labour.

The growth of the Christian church—the substitution of a great monotheism for the numerous polytheisms of antiquity; the change from the old cults, which were but national religions or consecrations of the national idea, to the new worship, which was international, not national, and intended to embrace all humanity-brought in its train the most cardinal changes. This is, of course, not the place to recount the changes produced in economic relations by the church teachings: it will suffice barely to mention the total alteration in the treatment of the poor, the improvement in the condition of woman, the conception of the dignity of labour hand in hand with the institution of holidays for the workmen, and the efforts for emancipation of the slaves. Some of the patristic authors even went so far as to preach practical communism, although their object, far from being that of inciting the rabble to resistance or of sowing the seeds of discord, was simply to recall the wealthy to a sense of their own obligations, to spread the gospel of fraternal love and charity, and to remove some of the hideous moral enormities with which the later imperial civilization was honeycombed.

It was, however, not until the scholastic age that any distinctive economic doctrines were formulated. The increase of industry and commerce in the eleventh and twelfth centuries, the rise of the municipalities and the growth of the town-guilds, craft as well as merchant, lent an increased impetus to the consideration of economic topics,—an impetus still further strengthened by the discovery and annotation of Aristotle's Politics. The subject of money, for instance, received a careful treatment, and the so-called Gresham's law was as well known to the authors of the fourteenth and fifteenth centuries, beginning with Oresme, as it is to-day. The two great doctrines, however, that dominated all mediaeval economy, were those of usury and of reasonable price. The prohibition of interest was

founded, not on Aristotle's plea that money was barren nor even, except at the very first, on the injunction of St. Luke, Mutuum date, nihil inde sperantes; but on a complicated and artificial legal distinction, drawn from the Roman law. The theologians based themselves on the glossators and legists, and the wordy strife about "fungible" and "consumptible" things continued for several centuries, until finally settled by Salmasius, Turgot, and Bentham. But the doctrine influenced all mediaeval speculation: it was applied not only to loans, but to transactions of all kinds; it was the pivot about which there swung the theories of price, of exchange, of banking, and of trade; and an acquaintance with its provisions is indispensable to a correct comprehension of mediaeval economic life.

Of still greater importance, however, was the doctrine of justum pretium ("reasonable price") as expressed in the writings and exemplified in actual life. The middle ages were a period of customary, not of competitive prices; and the idea of permitting agreements to be decided by the individual preferences of vendor or purchaser was absolutely foreign to the jurisprudence of the times. The "higgling of the market" was an impossibility simply because the laws of the market were not left to the free arbitrament of the contracting parties. Under the supposition that the interests of the whole community would be best subserved by avoiding the dangers of an unrestricted competition, the government interfered to ordain periodical enactments of customary or reasonable prices-reasonable, that is, for both producer and consumer. Tabulated tariffs and official regulations of all things, from beer to wages, filled the statute-books; and it would have seemed preposterous for the producer to ask as much as he could get or, on the contrary, to demand less than his neighbour, and thus undersell him. The great offences of mediaeval trade in England, for instance, were regrating, forestalling, and engrossing,-buying in order to sell at enhanced prices, intercepting goods on the way to market to procure them more cheaply, and keeping back wares purchased at wholesale in order to strike a more favourable bargain subsequently. But, above all, great solicitude was shown for the interests of consumers, and every precaution was observed to preclude the possibility of overreaching the public. It was deemed of paramount importance to watch

over every stage of production; and the whole institution of craft-guilds was nothing but an adjunct to the municipal administration in the endeavour to attain this end. Erroneous and misguided as was some of the legislation, there is no doubt that it was the outgrowth of moral ideas, and to a certain extent justified by economic necessities. Justum pretium was the manifestation of a great moral principle, and until the decay and disintegration of the guild system set in, through the growth of competition and the development of a distinctive capitalistic class, the mediaeval doctrines and institutions were undeniably well suited to the exigencies of economic life.

The so-called Mercantile System was simply the manifestation, in one particular direction, of the general mediaeval conception of national polity. The commonly accepted notions of its teachings form nothing but a distorted caricature, and it would indeed be surprising if a set of ideas upheld by the leading minds for many generations should be such a tissue of absurdities as some would have us believe. The earliest writers, such as Bodin in France (1578), and Hales in England (1581). had their attention called to the general disarrangement of industry and prices, caused in great part by the influx of bullion from America, and by the gradual development of competition as against custom. Their ideas, as expanded in the seventeenth century by English and continental economists, were simply to foster industry, to increase population, and thus to bring about a general prosperity. The great writers of the times never entertained such an absurd idea as that wealth consisted of money; they, indeed, had a somewhat exaggerated opinion of money as an evidence of national prosperity, and some of them laid undue weight on the importance of the "balance of trade" argument: but their ultimate aim was national aggrandizement through industrial as well as commercial supremacy. The economic policy of Colbert, as of Frederick of Prussia, does not at all correspond with the accounts usually advanced, and was in reality dictated by considerations of the highest statesmanship, and in many respects eminently well fitted to the necessities of the period. The prominent English writers of the seventeenth century, such as Child, Petty, North and Locke, entertained opinions on the subject of international trade, which did not differ so fundamentally from the principles laid down by Ricardo and Cairnes in a later century. Their ideas on the nature of national wealth, moreover, were in many respects correct; and they perceived and explained with lucidity the shortcomings of the industrial system, which was then gradually becoming unsuited to the altered conditions of the period. The English authors struggle for free trade, in the sense of freedom of exportation; the Italian Serra (1613) invokes the principle of "liberty of contract"; the Frenchman Montchrétien (1615) does not think of subordinating agriculture and industry to commerce.

The Mercantile System, even in its crudest form, showed that its defenders were beginning to form some conception of a national economy. Practical economic systems can never be entirely divorced from political considerations: and it is these political considerations alone which enable us to understand some of the fundamental mercantilistic notions, such as the desire for increased population or the "balance of power" argument. The Mercantile System formed a fitting pendant to the political attempts of the absolute monarchy, which the new political science has taught us to regard not only as a necessary, but as a salutary, step in the advance from mediaeval feudalism to modern constitutionalism. The doctrines themselves underwent a gradual modification, and in their final form taught that the real advantage lay in the stimulation of production and the greater activity of industry. The Mercantile System had, at the time, undeniably a certain historic justification.

2. The Eighteenth Century.

In the eighteenth century, however, the system, with its restrictive measures and its illiberal policy of national exclusiveness, had become antiquated. Inquisitorial custom-houses and tariff wars had multiplied; industry was fairly throttled by minute regulation of details; in France alone four large quarto volumes were filled with complicated, unintelligible and contradictory regulations of manufactures. The confusion was heightened by the excesses of the monopolistic companies and the degeneration of the craft-guilds, which now, far from being welcome auxiliaries to the municipal administration, had become

oppressive, exclusive bodies, with an hereditary, caste-like organization. What wonder, then, that a sect of men should arise who sought refuge from this intolerable pandemonium of perpetual interference in the soothing doctrine of absolute liberty? The times were ripe for a reaction,—a reaction in every sphere of life, political, religious, economic. In politics this was ushered in by Rousseau, in philosophy by Voltaire and the encyclopedists, in economics by the advent of the Physiocrats. The great significance of the Physiocrats, as their name denotes, is the belief in the natural order of liberty; their tenets of produit net, impôt unique and the application of capital to land on a large scale being subordinate doctrines, which grew out of their endeavour to rehabilitate agriculture, and to bring the dissolute classes back to a sense of primitive simplicity. In contrast to the Mercantilists who had laid stress on the national element, applying the principles of domestic economy to political life, the Physiocrats represented the universal, the cosmopolitan, the international view. In that confused progeny of stoic philosophy and Roman law, nurtured by the continental jurists and philosophers, and known as the law of nature, Rousseau found the life-blood of his contrat social, the support of his revolutionary theories. And the same misconception led Quesnay and Gournay to formulate the laws of industrial society as eternal and immutable truths, which it was the function of man to expound, but which it would be utterly impossible—or, if possible, utterly ruinous-to change or tamper with. Laissez-faire, laissez-passer, is the key which unlocks all economic puzzles. The "be quiet" system, as Bentham calls it, is the sole panacea for human ills, the only hope of social regeneration. Give free play to the natural laws of liberty and equality, and prosperity will soon shine in all its refulgence on the expanse of national life.

The great statesman and economist, Turgot, undoubtedly made a move in the right direction in the celebrated six edicts of 1776, which abolished the guilds and the corvées, and reformed the corn-laws. The économistes, indeed, were indefatigable in their opposition to the abuses of the powerful, to the privileges of the few. In the place of restriction they demanded freedom, in the place of nationalism they demanded cosmopolitanism, in the place of paternal government they demanded individualism.

In every respect the sheer opposites of their predecessors, the Physiocrats beyond all cavil sounded the just note of discontent with prevailing theories and institutions, which had become utterly unsuitable and anomalous; but their enthusiasm for reaction made them overshoot the mark, and go to the other extreme. An excellent work was done in clearing up the old errors as to the function of government; but it is almost too much to ex-/ pect from the Physiocrats the consciousness that they also were going too far. They could not be expected to foresee that the absolute reign of the "let alone" system would produce, as it has done, evils almost as great as those against which they battled. Physiocracy was a timely and necessary movement. The ardour of its advocates in the search for economic laws enabled them to throw great light on the subjects of the division of labour, capital, wages, interest, and profits; and the only fault that can be found with them is, that, in unduly exaggerating the possibility of individual self-interest as an emanation of natural law, they laid the germs of a doctrine which was in future decades to prove an obstacle to a well-rounded social reform.

It is well known that Adam Smith, the greatest of all economists, owed much to the Physiocrats, and that he was for some time a disciple of Quesnay. Many portions of the Wealth of Nations in fact are translations of, and excerpts from, the French writers; although Smith, of course, opposed their minor doctrines of the sole productivity of agriculture and of the single tax on land,-a project which had already been formulated in the preceding century by Locke. But Smith was far more than a slavish follower of the Physiocrats. He took, indeed, many thoughts which he found in other authors, English as well as French; but he individualized their passing remarks, he placed them in such a connection that they became invested with a new significance, he clothed them in such a garb that they must henceforth be regarded as his own progeny. And this, after all, was a work of genius, for it is given to no man to be entirely original: every one is the product of the times, of the Zeitgeist; and the ideas of the period are unconsciously reflected in the individual. So with the idea of liberty in Smith: he too was feeling the indefinable influence of the new current of thought, already partly expressed in Hume and Cantillon. Had he never known the Physiocrats, his ideas on liberty would have been the same, for both were an unconscious emanation of the spirit of the age.

Smith's thought were formed on the very threshold of the industrial revolution. In 1758 James Brindley built the first canal between Liverpool and Manchester, in 1769 the barber Arkwright re-discovered Wyatt's method of roller-spinning, in 1770 Hargreaves perfected the spinning-jenny, in 1776 Crompton patented his mule founded on the water-frame, in 1765 Watt discovered the use of steam as a motor power, and in 1786 Cartwright invented the power-loom. The domestic system of industry, which had supplanted the handicraft system at the beginning of the eighteenth century, was now itself supplanted by the factory system. The conditions of English life were fast outgrowing the swaddling-clothes of official omniscience and governmental sciolism. In the town where Smith laboured there were numerous protests, by individuals and by societies, against the antiquated policy of the government. It is not surprising, then, that, after a careful résumé of the shortcomings of the Mercantilists' commercial policy and of the Physiocrats' agricultural policy, Smith should have concluded with the celebrated passage: "All systems, either of preference or restraint, therefore, being thus completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord. Every man. as long as he does not violate the laws of justice, is perfectly free to pursue his own interest in his own way, and to bring both his industry and his capital into competition with those of any other man or order of men."

And yet Smith was too broad-minded to hold this doctrine without any qualifications, for he possessed a far truer historical spirit than many of his successors. He upholds the navigation law of Cromwell as a measure of the wisest statesmanship; he defends the necessity of export duties in certain cases; he confesses that the interests of individuals "in any particular branch of trade or manufacture are always in some respects different from, and even opposite to, the interest of the public." It cannot be denied that Adam Smith's philosophy was to a great extent correct: his doctrines most clearly showed the impolicy of the combination laws, of the acts of settlement, of the statutes

which fixed the rates of prices and wages. Smith's whole work consisted in pulling down the rotten fences which obstructed the path of the artisan, the farmer, and the merchant, and we of to-day cannot be too grateful for the salutary impulse he thus gave to all economics. But what was then good, is not necessarily good to-day. We must not make Smith responsible for the faults of his disciples. The Wealth of Nations was written at a time when there was need of such a reaction as it undertook to initiate. Before building the new, it is imperative to tear down the old, and Smith certainly succeeded beyond his anticipations in demolishing the old principles. But since his time new conditions have arisen. The factory system, then in its infancy, has revolutionized industrial life, and has brought in its train problems which scarcely existed in 1776. The machinery of commerce and transportation is vastly more complex, and cannot be regulated by any such simple methods of laissez-faire as were possible when Smith wrote. It is, of course, not fair to take him to task for failure to perceive the consequences of his doctrines when applied under different conditions; but it is legitimate to protest against the acceptance, at the present time, of his views in so far as they are one-sided and inadequate. Smith's work is by far the most important ever written in the science; but we must not, on that account, bow down blindly before its author, and meekly accept all his conclusions. Had we lived in 1776, we should certainly have been followers of Smith: did Smith live in 1886, he would no less surely have been in the vanguard of the new school.

3. The Classical School.

On the lines thus marked out by the great Scotchman, Malthus and Ricardo continued the work. The one clarified the current ideas on the subject of population, and threw light on some doctrines left obscure by Smith: the other sought to elucidate the complex problem of value, applying his analysis to the law of rent,—of which he was the formulator, not the originator,—and being moderately successful in his treatment of currency problems. The outcries of late raised against the personal character of these two eminent economists are utterly groundless. Mackin-

tosh expressly tells us: "I have known Adam Smith slightly, Ricardo well, Malthus intimately. Is it not something to say for a science, that its three great masters were about the three best men I ever knew?" And yet the exclusive predominance of abstract methods brought the two great followers of Smith to some faulty conclusions. In the case of Malthus, we have, as a result of his justifiable indignation against the poor-laws and the fantastic dreams of a Godwin, this curious spectacle. A benevolent clergyman, full of compassion and sympathy for the poor. feels himself impelled to declare that no possible efforts of government, no possible social movements or spontaneous plans to better their condition, can be of any avail. To the state he says: "Hands off;" to the philanthropists, economists, and statesmen he cries: "All you can do is ineffectual;" to the workmen themselves he declares, "Refrain from combination, the sole method of bettering your condition is to practice self-restraint." And in this remedy he himself puts little faith. The main causes of the distress he declares to be "to a great extent, and for a certain time, irremediable." And all this because of his firm belief in the natural laws, the immutable principles of an abstract political Truly a sad spectacle, which would be absurd if it were not so sorrowful! It might be termed a philosophy of despair, a sad starting-point for nineteenth century economics. Fortunately modern investigation and recent events have proved the groundlessness of such a system of negation; they have shown that social reform is possible, and that rational improvement need not be checked by the bugbear of the wages-fund which the followers of Malthus, relying on his doctrines, set up as an absolute fact; they have demonstrated that other classes besides the workmen have duties to perform, and that the solution cannot be reached by declaring the labourers themselves the sole cause of all their own unhappiness and dissatisfaction.

Ricardo, again, with all his keen and penetrating analysis, based his apotheosis of free competition on insufficient foundations. The half-century that had elapsed since Adam Smith began his work, had converted the slow industrial change into a revolution. In the domain of international trade, indeed, the conditions had become peculiarly favourable for an application of Smith's doc-

trine, and Ricardo did an admirable work in paving the way for the anti-corn-law league of the forties. But the semi-metaphysical, the a priori element in the Principles of Political Economy and Taxation, produced, especially in the hands of his followers, a set of unreal and inapplicable conclusions. The theory of economic progress which formed the result of his labour is as unsubstantiated as it is pessimistic. Profits must fall, rents must rise, and wages must remain about stationary, not keeping pace, on the whole, with the advance of wealth and prosperity. In this there are some grievous misconceptions, not the least being the assumption of "natural wages" and "natural profits" varying in an inverse order to each other. But here, again, Ricardo is the child of the particular epoch in which he lived. His assertion that profits rise as wages fall, and vice versa, has lent the socialists of to-day the great argument of the necessary antagonism of capital and labour. Ricardo, curiously enough, passed over this, and drew the conclusion that the interests of labourer and capitalist are identical as against their common enemy, the land-owner. Wages and profits go hand in hand, opposed to the "landed interest." Who does not see that the peculiar conditions of England at this time were responsible for a theory which has lately been reformulated and exaggerated by George? Ricardo, indeed, was no enemy of the workingclasses: his opponents, who term him "a heartless worshipper of mammon," "the founder of the Hebrew-Caledonian school, thinking of nothing but the interests of money," are, of course, guilty of an absurd exaggeration. Just because he ardently desired the welfare of the toiling masses, did he attempt to remove the obstacles in their path. He was an able advocate of the repeal of the combination laws in 1824. But his efforts were limited to removing the legislative obstacles: he did not yet perceive the necessity of removing the obstacles that were growing out of the system of free competition itself. During the years in which he matured his conclusions, the evils of the factory system had not yet become thoroughly developed or widely known. Ricardo's ideas were not yet entirely unsuited to the period, even though we of to-day must confess that his desire for abstract generalizations, sometimes founded on insufficient postulates, initiated a method of reasoning in economics, which in the hands of not a

few followers and popularizers led to fruitless discussions and hair-splitting distinctions. We will not go so far as Jevons, in saying that "that able but wrong-headed man. David Ricardo, shunted the car of economic science on to a wrong line:")but we do maintain that his favourite use of hypothetical methods-i.e., a system based on the hypothesis of natural law. coupled with a belief in the infallibility of self-interest-produced. at least in some of his followers, serious exaggerations and results, not in accord with the actual facts. (Ricardo's theories are like rough diamonds, encrusted in dirt and sand; it is the duty of the economists of this generation to pare down and polish the edges, ridding them of their excrescences, disclosing in some instances the flaw in the jewel within, which renders it worthless, but showing in other cases that the core at least is sound, and capable of reflecting the light thrown on it by the lamps of recent experience.

The so-called orthodox school of England-McCulloch, Senior, James Mill, etc.—pursued an opposite course. Instead of clearing up, they increased the confusion; in lieu of modifying Ricardo's conclusions, they attempted to embed them more firmly in the unsubstantial foundations. One proposes to make of the science a mere "catallactics;" another wishes to call it "chrematistics," a mere science of exchanges. All agree in venerating the absolutely immutable natural laws, with which it is sacrilege to The factory laws they deride; the trade unions they howl down; the growing abuses of the great industries and the large corporations they overlook. "Labour is a commodity," they say, "if men will marry, and bring up children to an overstocked and expiring trade, it is for them to take the consequences. If we stand between the error and its consequences, we stand between the evil and its cure; if we intercept the penalty, we perpetuate the sin." They quote with approval Dignan's phrase: "To augment the annual production, to carry it as far as it can go, and at the same time to free it from all restraints,—that is the great object of government." No thought of any higher aims. of a more equitable distribution—simply the greatest possible increase of material commodities. And even the noble Cobden was permeated with the narrow political philosophy of the time. But the labour question proved the rock on which the old school split. They lost supporter after supporter who saw the hollowness of the arguments, the inadequacy of the results. The professors and journals, in their very exaggeration of such opinions, began to be discredited. The science itself was fast losing its hold on thinking men, who were not satisfied with mere abstractions and what seemed to them practical obstructions to progress. The labourers looked upon economics as a science necessarily hostile to themselves; and this, too, notwithstanding the eloquent pleas of Bastiat, who attempted to prove that all interests are harmonious by natural law, and that it would be the height of folly to interfere with this beneficent progress. The economists were optimistic: the laymen grew pessimistic.

4. The Reaction.

The first isolated mutterings of discontent came from France. Simonde de Sismondi already, in 1819, accused the orthodox school of "forgetting the men for the things; of sacrificing the end to the means;" of producing a beautiful logic, but a total forgetfulness of man and human nature. The positive side of Sismondi's arguments was, however, far less strong than the critical portion; and his protests, hence, fell on careless ears, although he led a small band of enthusiastic followers. Friedrich List, again, with his theory of nationality and of productive forces, did a good work in calling attention to the historic, relative element in all economic progress; but he vitiated the effect of his "national system" by turning it into an exaggerated plea for protection. socialists, such as Weitling, Marlo, and Proudhon, uttered energetic and effective protests against the prevailing systems; and even in England able men like Thompson and Jones wrote large works to countervail the exaggerations of the orthodox school. But the new ideas first obtained a truly scientific basis about the middle of the century, when three young German economists -Roscher, Knies and Hildebrand-proclaimed the necessity of treating economics from the historical standpoint. They initiated a new movement whose leading principles may be thus formulated: 1. It discards the exclusive use of the deductive method. and stresses the necessity of historical and statistical treatment. 2. It denies the existence of immutable natural laws in economics, calling attention to the interdependence of theories and institutions, and showing that different epochs or countries require different systems. 3. It disclaims belief in the beneficence of the absolute laissez-faire system; it maintains the close interrelation of law, ethics and economics; and it refuses to acknowledge the adequacy of a scientific explanation, based on the assumption of self-interest as the sole regulator of economic action.

An entirely new impulse was thus given to scientific research. Freed from the yoke of a method which had now become obsolete. the new school, devoid of all prepossessions, devoted itself to the task of grappling with the problems which the age had brought with it. The amount of actual knowledge, historical and theoretical, imparted by Schmoller, Held, Brentano, Wagner, and the host of younger economists, cannot be underestimated or neglected by any student. In Italy the entirely new spirit infused into economics is attested by a number of able writers; and even England has not lagged behind in the work. With Fawcett and Bagehot the last important representatives of the old school practically disappeared; Mill himself had gone through an evolution, and was sincere enough to express his disbelief in the old economics, and to a certain extent in his own book; while Leslie, Toynbee, and our contemporaries, Marshall, Ingram, and Cunningham, are thoroughly imbued with the new ideas.

What, then, has this historical résumé established? It has proved, in the first place, the relativity of economic doctrines. To maintain that all previous generations and countries have erred, and that we alone possess the truth, is an egotistic assumption based, moreover, on the untenable hypothesis of the identity of human nature and the similarity of outward conditions. Our economic system is not necessarily the only true one: there will be and have been as many systems as correspond with the current conceptions and institutions. Many of our economic ideas are based on the postulate of absolute right of property, or on the supposition of the necessary division of producers into employers and employees. And yet we know to-day that private property is not an absolute natural right, but that it is, on the contrary, a comparatively recent conception, an institution justifiable only on the grounds of expediency, and whose extent may be limited again by these same considerations of expediency: it

is a question, not of right, but of arrangements which will inure to the greatest possible social prosperity. Again: the distinction between employer and employee is not a necessary one, inherent in the nature of things: the very basis of the mediaeval guild system, in so far as it had a distinctive characteristic, was the identity of employer and employee, the amalgamation of capitalist and labourer in the same individual. How, then, can we speak of unchangeable economic laws, good for all times and all climes? In antiquity we have seen an economic system based on the complex household and the undoubted omnipotence of the state: in the middle ages we have found a civilization founded on the all-engrossing conception of justum pretium; at the beginning of the nineteenth century we notice a régime of pure individualism, of unalloyed free competition. Must we not confess the relative justifiability of the early municipal regulations of trade and industry, or the bullionist idea of hoards of precious metals, in a time when warfare was perpetual and bills of exchange unfamiliar? The truly historical mind will acknowledge, with Adam Smith, the immense benefits of Cromwell's navigation act, but will rejoice, with Cobden, at the repeal of the corn-laws; he will praise, with Gournay, the attempts to unshackle industry, but will deplore Ricardo's opposition to the factory acts; he will applaud Bentham's demolition of the usury laws, but will realize the legitimacy of recent endeavours to avoid the unquestioned evil of absolute liberty in loans. He will, in one word, maintain the relativity of theory; he will divest the so-called absolute laws of much of their sanctity, and thus henceforth render impossible the baseless superstition that all problems can be solved by appeal to the fiat of bygone economists.

But, second, we must repudiate the assertion that the new movement is a German movement. The discontent with the continued application of antiquated doctrines made itself felt in the valley of the Po, in the heart of New England, and on the banks of the Thames. It is true that Germans happened to formulate the discontent more systematically at first; but the present movement would ultimately have attained the same proportions had Roscher and Knies never lived, just as Adam Smith would have expressed his ideas had the Physiocrats never existed. The new school is the product of the age, of the Zeitgeist,

not of any particular country; for the underlying evolutionary thoughts of a generation sweep resistlessly throughout all countries whose social conditions are ripe for a change. The more extreme of the Germans, moreover, have themselves overshot the mark, have unduly undervalued the work of the English school, and have in their zeal too dogmatically denied the possibility of formulating general scientific laws.

Finally, we have established the continuity of political economy. The history of economics demonstrates how certain doctrines arose, developed in succeeding generations, and were ultimately overthrown, or, on the contrary, shown to be fundamental truths: how the teachings of successive schools or of individual writers developed the germ of scientific explanation, expanded the law and gradually stripped it of its inaccuracies and redundancies, until many of the complicated phenomena were shown to be manifestations of distinct and well-settled principles. The doctrine of international exchanges underwent a progressive modification, from Hume, Smith, Say, Ricardo, Mill, to Cairnes and Goschen. The theory of the wages-fund, on the other hand, as formulated by Turgot, Malthus, Senior, and McCulloch, was discredited by Herrmann and Sismondi, until finally overthrown by Longe, Brentano and Walker; and in like manner with many other so-called principles. The new movement in political economy simply emphasizes this progressive continuity. maintains that the explanations of phenomena are inextricably interwoven with the institutions of the period, and that the practical conclusions must not be disassociated from the shifting necessities of the age. We accept with gratitude the results of former economists, as containing much of what was true at the time; but we protest against the acceptance of all their principles as practical guides for the present generation. We use the preliminary results of former decades as forming approximately secure bases; but we desire to erect a structure more suitable to the exigencies of the present. The paramount question of political economy to-day is the question of distribution, and in it the social problem (the question of labour, of the labourer),-how, consistently with a healthy development on the lines of moderate progress, social reform may be accomplished; how and in what degree the chasm between

the 'haves' and the 'have-nots' may be bridged over; how and in what degree private initiative and governmental action may strive, separately or conjointly, to lessen the tension of industrial existence, to render the life of the largest social class indeed worth living. This and the other complex problems of the present day cannot be solved by a simple adherence to the principles of a bygone generation. The tenets of a bald individualism have been placed in the scales of experience, and have been found wanting. The continuity of political economy inculcates the lesson, no less profound than salutary, that there still remains something to be learned, and much to be done, before its teachings can be accepted as the loadstars of the present generation,a lesson whose recognition will preserve us from two violent extremes: that of falling into a state of quiescent conservatism, which regards all that is as good; or that of adopting the vagaries of the radicals, who look upon all that is as bad, and who consider the foundations of the science itself as unsatisfactory as the positive institutions. (The continuity of political economy teaches, in other words, the golden mean.

CHAPTER TWO.

OWEN AND THE CHRISTIAN SOCIALISTS.

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To the attentive student of English economic history, nothing can be more striking than the great transformation effected in the spirit in which social problems and the relations of the working classes are discussed at the present day. The rise of the factory system with its attendant abuses; the narrow class legislation of Parliament which left the operatives without any adequate protection and at the same time severely repressed all attempts at combination; the vicious system which regulated wages and prices through the fiat of peace justices; and finally the unfortunate wages-fund theory of orthodox economists-all these causes combined to produce in the higher classes a feeling of indifference, in the labouring population a spirit of sullen and dogged resistance which occasionally found vent in violent outbreaks and finally culminated in the Chartist movement. To-day the state of affairs is materially altered. Trade-unions are no longer regarded as revolutionary or illegitimate: their just demands are recognized and their aspirations favored. Eminent economists and noble lords preside at their congresses and conventions. Remedial legislation has been introduced to remove crying abuses and to redress absolute wrongs. The dogmas of the Manchester sect are being supplanted by the doctrines of the historical school: and, above all, the whole tone of current discussion and the point of view adopted by employers afford abundant proof that the antagonism of class interests is by no means so acute as in the generation gone by. In England, which has far outstripped us in the path of economic reform, the beneficent effects of this vast change of sentiment have already begun to make their appearance; and among the most potent factors in producing this great change must be classed the eloquent and enthusiastic apostles of socialism, whose work we shall attempt briefly to describe.

There is perhaps no term in the whole vocabulary more abused than the word socialism—a term in the minds of some tantamount to organized revolution and fraught with the direct possibilities of violence. But the underlying idea of the word is in itself harmless. Socialism is the opposite of individualism; and in this wider sense we are all more or less socialists. The mainsprings of all human action are of a twofold character; we find in every individual impulses or forces which tend to weld society together, and to render the idea of self subservient to that of the common weal. True socialism simply demands a wider scope for the play of this public spirit, a fuller appreciation of the importance of this common moral element which underlies all collective action. To confound it with communism involves a crass misconception; to identify it with revolution is no less serious an error. A scientific nomenclature ought to distinguish between socialism in the broader and in the narrower sense. The former demands economic and social reform; the latter advocates political disturbance and revolutionary propaganda to effect its ends. The one is pacific and orderly, laying stress on the development of those ideas which render harmonious coexistence in society possible. The other is essentially political in its aspirations; its formidable weapons are those of incitement to violence and invitation to crime; its object is the assumption of all the means of production by governmental machinery. The line of demarcation between the two is often irregular and unclear; but socialism proper, as a principle of human action, connotes neither violence nor anarchy, and does not necessarily imply the realization of its ideal through the agency of governmental interference. English socialism has in fact been neither anarchic nor disruptive; and in so far as it has remained untinged by the infiltration of continental ideas, it has been peaceable, deprecating all endeavours to excite fiery opposition among the masses, and has expressly disavowed faith in state aid as a universal panacea.

Socialistic and communistic ideals are not exclusively products of modern times. At all epochs and in all nations the souls of noble men have been stirred to righteous indignation at the sight of so much oppression and perhaps undeserved misery among their fellow-beings, and propositions to effect a regeneration of

society have never been lacking. Nothing can be more erroneous than to represent the social reformer as a bugbear, to depict him as a hypocrite devoid of all true sympathy with humanity, and concealing his own selfish designs under the mask of good will to all. There are, indeed, and always have been, demagogues who work upon the dissatisfaction of the masses and attempt at all costs to achieve their own preferment by using the weapons of popular agitation; but it cannot be denied that many great leaders in the movement for social reform now as previously have been men of the purest motives and the most spotless lives. At the same time, a more thorough knowledge of economic history would convince many of our modern social therapeutists that their so-called great discoveries are mere restatements of ideas hoary with the age of centuries, and that their schemes of a reconstruction of the universe are perhaps as far removed from a speedy realization as those of their many predecessors.

England, too, has had her social reformers and agitators before this century. We need only mention Wat Tyler, John Ball, Jack Cade, Robert Kett and, at the close of the eighteenth century, the agrarian communist. Thomas Spence. But these were all men who formed no new systems, and exerted no commanding influence in shaping the course of future ideas. It was reserved for the nineteenth century to witness the social reforms of Owen, the Chartists, the Anti-Corn Law Leaguers, the Christian Socialists, and, finally, the social leaders of to-day. Among these, the work of Cobden and Bright, who were anything but socialists, has been repeatedly described; that of Owen has been partly misunderstood; and that of the others is all but unknown, or at least inadequately appreciated. During the second quarter of this century, moreover, we find a numerous school of economists, hitherto entirely neglected, who manfully battled against the prevalent tendencies, and some of whom may fairly be termed socialists. The history of English socialism presents, in fact, a scarcely trodden field for the investigator,1 a completely forgotten side of national development; and yet the

¹ Janzhul, Angliskaya svobodnaya torgovlya, vol. ii. ch. 3, gives the best, although still incomplete, account of English social movements.

[[]In the forty years that have elapsed since this chapter was written the literature of the social movements in question has become abundant. As to the British nonsocialist critics of, the following chapter.]

whole civilized world is to-day swayed by ideas for which we must in great part thank the English socialists. We propose, in this paper, to say a few words about Owen, and to give a sketch of Christian Socialism, reserving for future examination the remaining phases of English social reform.

1. Robert Owen.

The name of Robert Owen will ever be connected with the village of New Lanark, a little spot on the Clyde, where the celebrated Arkwright had in 1784 erected one of the earliest cotton spinneries in Scotland. Owen tells us, in his autobiography, with what enormous difficulties he had to cope, when he finally purchased the property in 1799. The position of the workers there. as in all the factories of the period, was most pitiable. Women and children of the most tender age were employed under conditions which debased both mind and morals, which turned them into stunted cripples and incurable criminals; drunkenness and ignorance, filth and immorality, were the characteristics of a population which viewed the efforts to inaugurate a new system with mistrust and suspicion. Owen, with his belief in the omnipotent effect of circumstance in moulding character, was naturally averse from all systems of punishment, preferring the preventive to the positive checks in his treatment of crime and disorder. A long experience as manufacturer had taught him that sudden changes were injudicious, and would defeat their own objects; and he therefore proceeded cautiously in his improvements. Drunkenness was discountenanced by the introduction of resorts where the workmen could find both pleasure and profit; immorality was checked by informal lectures setting forth its practical evils. as well as by various ingenious contrivances calculated to appeal to the honour of the operatives; the employment of young children was discontinued; the homes of the people were materially improved; good, honest provisions were supplied at cost price; children's schools were started; and insurance funds against old age and illness were not forgotten. Owen himself was governor of this patriarchal society, and to him all disputes were referred for ultimate arbitrament—a function he exercised so satisfactorily that quarrels decreased with amazing rapidity.

career at New Lanark was the most fruitful and beneficent epoch in an eventful life, and for many years he centred his attention on the necessary and the possible. Unhampered by lack of means, untrammelled as yet by the consuming desire to regenerate the world which was afterwards to turn him into a visionary schemer and a sterile agitator, he confined all his endeavours to the mill. The fame of the infant school, or New Institution, spread far and wide, until celebrities from all parts of the world were counted in the unceasing flow of visitors.

In 1812 Owen began to divulge his theories to the public. The underlying thought of his philosophy, the idea that repeatedly recurs in all his writings, is, that man's character is formed for not by him. "The general bodily and mental differences are solely the effects of education; man becomes a wild, ferocious savage, a cannibal, or a highly civilized and benevolent being, according to the circumstances in which he may be placed from his birth," 1 He ascribed all human misery to absolute ignorance of this vital principle, and in the New View of Society he calls the notion that individuals form their own character, "the enemy of humanity, the hydra of human calamity." 2 The will of man has no power whatever over his opinions, and only a complete reversal of all educational methods will succeed in changing the face of the universe and the destiny of nations. This apotheosis of circumstances naturally led Owen to the extreme conclusion that individual man is absolutely irresponsible for his conduct or character, since these are formed for him by society.

Such always remained the substratum of Owen's teachings; and yet his practical and immediate propositions to the government were, with one exception, of a modest kind, many of them having been actually carried out to-day. He was, however, no economist; and, like too many enthusiasts who proclaim far and wide their novel solution of a problem the first conditions of which they have only insufficiently studied, generally came to grief in the attempt to put his later theories into practice. Already in his earliest writings he proposes that the government prepare a reserve of employment for the surplus labourers, "the

¹ Speech of 1812 at Glasgow; p. 14 of the 1816 ed. of Essays on the Formation of Human Character.

² Ibid., pp. 57, 99, 125.

price of public labour never falling below the means of temperate existence." In this we see foreshadowed the celebrated doctrine of *droit au travail* which played an important rôle in the Revolution of 1848, and which contains a principle rather perilous to the perpetuation of the state.

With this exception Owen did not invoke undue state intervention. or ascribe to the government more extended functions than it everywhere possesses to-day. His position during the New Lanark career was, therefore, simply that of a reformer, not of a socialist; and his efforts were directed mainly to the abolition of certain laws which he regarded as in the highest degree detrimental. He appeals to the individuals themselves. and in an eloquent preface addresses the superintendents of factories, pleading the cause of the living machinery, hitherto so neglected.2 But while doing his utmost to bring the merits of the system to the cognizance of manufacturers and educators, he was careful to abstain from appealing to the passions of the mob. His gentle and almost childlike nature, his faith in humanity and in the absolute truth of his own remedy, made him timorous of any interference by the working classes themselves. In fact, since the entire character of a generation is, according to Owen, solely dependent on the circumstances to which it is subjected, to take the governing classes to task would be as irrational as to punish the malefactor for crimes committed by his predecessor or neighbour. There was, indeed, no room for violence in Owen's philosophy. The importance of his naïve but large-hearted confidence in self cannot be overestimated, for had he in the days of his prodigious influence cast his lot with the party agitators in kindling class hatred, the disaffection of the artisans, foreboding enough at the time, might have been dangerously increased. ("To do good to all men, to explain what is true, not to attack what is false," is the self-expressed object of his writings at this period.)He was didactic, not revolutionary.

In all this philosophy there is a germ of truth. The importance of environment as a factor in change, both physical and moral, is a platitude which needs no justification, and has found a reformulation in the modern theory of evolution. But to mag-

¹ Essays on the Formation of Human Character, p. 169. ³ Ibid., p. 68.

nify this principle into the one sole cause of all transformation, and to deny the existence of moral responsibility, is to abdicate for man the sense of his own individuality and to adopt a theory of fatalism-is in fact to confound virtue and vice by removing all consciousness of accountability for either. Owen failed to perceive this; his glorification of circumstance is an extreme exaggeration of a partially correct idea; his fond belief in the immediate acceptance of its complete truth was a result of his childlike and trusting enthusiasm. For some years, indeed, he continued his endeavours to effect practical reforms; and, after a meeting of cotton manufacturers in 1815, began an agitation for a factory law which should curtail the hours of work, prohibit infant labour, and afford a sufficient protection to the health and education of the operatives. Notwithstanding the opposition of the employers and the doleful predictions of the orthodox economists who foresaw the ruin of English industry by this unheard of violation of laissez-faire, the bill finally became a law in 1819—the precursor of many reforms which have totally changed the condition of the English workmen. For this, if for nothing else, Owen is deserving of the highest praise and gratitude.

But he was now no longer content with these exploits. In 1817 he outlined the plans, before only vaguely hinted at, of the Agricultural and Manufacturing Villages of Unity and Mutual Coöperation. This was a most important step, the turning point in his career and the virtual beginning of English socialism. Every one was to work for the benefit of all: the meals were to be cooked and eaten in common; dormitories in the shape of parallelograms were to be erected; the details of government were to be regulated in the most minute manner. Owen became a fanatic in the prosecution of his new ideal, considering himself the most popular man in the kingdom, and influenced by the lavish attention heaped on him from all quarters. juncture, however, his violent attack on all religions 2 alienated the affections of many influential adherents-and it must be said that in this respect he showed a narrow-mindedness as

³ Address at City of London Tavern, Aug. 2, 1817, p. 58. Also, Tracts, relative to a New View of Society, iv., p. 77.

¹Report to the Association for the Relief of the Manufacturing and Labouring Poor, pp. 11-24. The ideas are in part taken from John Bellers, Proposals for Raising a Colledge of Industry, 1696.

great as that which he ascribed to his opponents. The change in his career was, however, the result not so much of his religious as of his socialistic views. Owen was now a world regenerator, an extremist, a socialistic idealist, whose confident anticipation of a millennium seemed to increase in inverse ratio to the failure of his practical schemes.1 To enter into the details of his communities would be tedious. The shortlived experiments of Motherwell and Orbiston in Scotland. of Ralahine in Ireland, and of New Harmony in Indiana, are well known; but Owen, nothing daunted, returned to America in 1829, greeted with universal acclamation, as on the continent ten years before. He had almost completed negotiations with the Mexican government for an immense tract on which to renew his experiment on a large scale when suddenly, with the fall of the Liberal government, all the bright prospects again vanished.

In this second period of Owen's activity there were two practical results: coöperation and socialism. Owen was the founder of the coöperative movement in England—a fact completely ignored by those who glibly use the word to-day with an utter failure to discern its true significance. "The secret is out." says Owen; "it is unrestrained cooperation on the part of all, for every purpose of human life." 2 \ Coöperation then simply meant association, a pacific communism as outlined in the propositions for the model villages. He did not have in view any such petty contrivances as the coöperative stores where provisions are sold, or even coöperative workshops where the capitalist employer should be eliminated; his conception was far more ambitious, and embraced such comprehensive measures as would render mankind ignorant of discord, desirous only of universal felicity. In 1830 the movement was in full blast, with over five hundred associations and numerous newspapers devoted to the cause. Owen took the matter energetically in hand, for the societies were all more or less tinctured with his peculiar views; and he looked forward to the period when they would be enabled to realize his aspirations in all particulars. "But," said he, "let it be universally understood that the grand ultimate object of all cooperative associations, whether engaged in trading, manufacturing, or agri-

¹ Of. Memorial to Allied Powers at Aix-la-Chapelle, p. 15. ² The Economist, Aug. 27, 1821.

cultural pursuits, is community in land." Annual congresses were held, and the grave English reviews treated the movement as a portentous fact, fraught with enormous possibilities. Everybody talked coöperation, and, as to-day, few really understood it. And although these far-reaching endeavours proved to be visionary, although the practical experiments all resulted in failure, Owen nevertheless initiated a movement destined, in future decades, to produce important results; and his enthusiasm gave to that movement an impulse the force of which is not yet spent.

The second great result of Owen's activity was the spread of socialism, which was to a great extent comprehended in the cooperative movement. It was the Owenites who first called themselves socialists or communists. In the Outline of the Rational System the whole theory is repeated in aphoristic paragraphs, and "useless private property" is discarded. But it must not be supposed that this socialism in its extreme form, this virtual communism, had anything in common with the revolutionary plans of a Babœuf. Such insinuations were indignantly repelled. Owen continued to preach moderation to the workmen; he was an apostle of love, peace and charity, not of envy and discord;

¹ The Crisis, vol. i., p. 23, May 5, 1832.

² [The Oxford Dictionary is in error in stating that the term "socialism" was first used in 1832. It is found first (as Grünberg points out in the Revue d'histoire des doctrines économiques et sociales, ii [1909], 306) in Giacomo Giulani, L'antisocialismo confutato, 1803, in the primitive sense of mutuality as opposed to individualism, as a philosophical principle. In its economic sense it was first used in 1827 in the Owenite Cooperative Magazine and Monthly Herald, ii., 509 (Nov.). Here the "Political Economists" [Mill and Mathers] are contrasted with the "Communionists or Socialists" on the question whether capital should be "individual or in common." On p. 216 we find mention of "the Communional System." Subsequent communications are signed sometimes by a "Socialist," sometimes by a "Communitist" or "Communionist"-i.e., believers in the Owenite communities. Grünberg, Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung, ii (1912), 378 copies at second hand incorrect quotations from Nettlau. It was not until somewhat later that the terms were used in France. In 1830 C. Pellarin spoke of the Saint-Simonians as "socialists," and P. Leroux, Philosophie sociale, 1830, objected to the "socialism" of Saint Simon, and desired to inaugurate his own brand of "Christian socialism." In 1831 A. Vinet of Geneva, in apparent ignorance of the English and French nomenclature wrote in Le Semeur an article on "Catholicism and Socialism" and later published a book on the Principles of Socialism.]

[&]quot;We wish equality, it is true, but it is voluntary equality; we are levellers, but we wish to level up, not down. . . . We have no desire to touch one particle of the wealth now existing." William Pare at the Congress of 1832.

and the motto of his principal journal read: "If we cannot yet reconcile all opinions, let us now endeavour to unite all hearts." 1

His theory of labour is especially interesting, as it forms the basis of the later "scientific" German socialism. Although failing to draw the logical conclusions of Marx, Owen did not shrink from a practical application of his doctrine that "the natural standard of value is, in principle, human labour." Believing money to be the root of all evil, he inaugurated in 1832 the Equitable Banks of Exchange, where property of all kinds was received and exchanged on the principle of "labour for equal value of labour." through the medium of labour-notes.2 It was not long, of course, before the labour-bazaar ended in dismal failure, proving already at that time the untenableness of the later theories of Rodbertus on the normaler Arbeitstag with its proposed labour-money, as well as of the banque d'échange of Proudhon. To maintain that labour is the source of value is inexact and misleading: to set up fixed quantities of labour as the measure of value is absurd. How can the labour of a hodcarrier and of a prima donna be reduced to the same dimensions and valued according to the time employed, according to the average 6d per hour of Owen, or the "labour-jelly" of the Germans? Who and what is to determine the proportion of this average labour in a bushel of wheat, and in a palace containing rare works of art? In Owen's bank a self-appointed council undertook the task, but with the most lamentable results, not because of any lack of discernment, but simply on account of the utter impracticability of the scheme. "Labour" becomes an unmeaning abstraction when the exertions of a scavenger and the lucubrations of a philosopher are jumbled together into one category, payable at the same rate per hour.

It was during this period that Owen made an ineffectual attempt to control the practical labour movement. The trade union effervescence, which followed the reform bill of 1832, gave him the opportunity. It was now that he founded The Crisis which bore the sub-title The Change from Error and Misery to Truth and Happiness, and that the labourers found in Owen's idea the possibility of application to the productive societies or

¹ The Crisis, vol. i., no. 9, May 26, 1832. ² For their form, see The Crisis, vol. i., p. 61.

guilds which were fast springing up. After much travelling and many speeches Owen presided in 1834 at a congress intended to launch the Grand National Consolidated Trades Union. But the militant character of the new organisation alienated Owen, who soon persuaded his immediate followers to withdraw from the trade union movement. As a token of this change of heart, he discontinued *The Crisis* and replaced it with *The New Moral World*. The working classes as a consequence turned from Owenism to Chartism, and soon followed other leaders.

After this inglorious attempt, Owen's interest in the narrower labour movement gradually vanished, his energy being henceforth centred on the propagation of his all-embracing socialistic and anti-religious schemes. Repeated addresses were issued and numerous associations formed, while the most bizarre ideas were proposed, such as the floating coöperative community on the Thames. In 1839 the final abortive attempt to found a community was made at Queenwood; and at about the same time he made the endeavour to divorce marriage from all religious sanctions. It was now becoming evident that Owen was gradually entering on his dotage. As Bentham says: "He begins in vapour and ends in smoke." 2 In 1850 he called the world a great lunatic asylum, but was still full of confidence in his ethical and anti-religious panacea; shortly after, he became an ardent spiritualist; and in his last year the aged philosopher showed the persistence of his convictions by addressing an open letter to the potentates of the earth, and by writing an autobiography full of vouthful enthusiasm.

Owen was thus a visionary, like St. Simon and Fourier; but, unlike them, he had a most beneficent effect on the social progress of his country. His economic doctrines were crude and often absurd; his theory of marriage was, to say the least, peculiar; his socialistic views were utopian: but he succeeded in proving that a factory could be made to benefit both master and workman; he initiated the reform in the condition of the labouring classes; he started the movement to separate the ethical

¹The New Moral World, November, 1834. Among Owen's societies were the Association of All Classes of All Nations, the National Community Friendly Society, the Social Missionary and Tract Society, the Universal Community Society of Rational Religionists, the Home Colonisation Society. ²Collected Works, Bowring's ed., x., 570.

from the theological elements in religion; he laid the firm foundation on which the cooperative movement of our times is erecting its successful edifice. England must thank him, above all, for his success in preventing socialism from consolidating with Chartism—a movement different from the superficially analogous cases on the continent. The French Revolution was perhaps more a social than a political cataclysm; and even to Morelly and Mably a political renaissance was only the first step to social regeneration. But with the Chartists, although the excitement was largely fostered by the sad economic condition of the labourers, the direct aims were purely political, and, if the truth be told, to a great extent innocent. Had Owen been of a less pacific nature; had he been willing to make use of the weapons of political discontent to reach his ends; had he, in other words, brought the socialists into coalition with the Chartists, the movement might have attained far more threatening proportions. But Owen deprecated all violence, and placed no reliance on the Chartist ideal. He desired reform; but it was voluntary, not compulsory reform. His kind heart and unquenchable confidence taught him to seek a change only through peace, love and education; his socialism was not destructive, but constructive; his activity engendered neither unrest nor disaffection.

2. The Founders of Christian Socialism.

So much for the first phase of English socialism. More interesting, although more short-lived, was another phase, that of Christian Socialism a movement called forth by the desperate state of the working classes toward the middle of the century. From the rise of the factory system down to the repeal of the corn laws, the condition of the artisans had been going from bad to worse, until their suffering, their inhuman treatment, their abject destitution, almost beggared description. It is difficult for us of the present day to form any conception of the listless indifference of the upper classes and the inattention

¹Cf. the Parliamentary Reports, especially of 1816, 1824, 1834, 1843; Faucher, Etudes sur l'Angleterre, 360-536; Engel, Lage der arbeitenden Klassen Englands; and for a good pen-picture, Thomas Cooper, Autobiography, ch. 13.

of professed economists in regard to the subject. The Christian Socialist movement arose as a protest against this indifference and the utterly negative standpoint of the scientists. Its two chief expounders were ministers of the Church of England, those noble-souled men, Maurice and Kingsley.

Frederick Denison Maurice, born in 1805, was one of nature's true noblemen.1 Professor, theologian, historian, philosopher, he was conspicuous in each character; and it is doubtful which should be more admired, his intellectual eminence or his moral earnestness. His humility of character, his modesty and distrust of self, the sympathetic aid which he so freely accorded to all searchers and strugglers, his uncompromising antagonism to every form of insincerity and evasion, coupled with a rare eloquence and a subtle power of moulding men's thoughts. endeared him to all. With a nature thoroughly steeped in religion, but impatient of petty differences of doctrine, he longed for one universal true church which should gather all mankind to its fold, which should exorcise all intolerance and injustice. Some of the most emphatic of his earlier writings were directed against the Oxford movement which, under the leadership of such men as Pusey, Keble and Newman, was rehabilitating scholasticism and championing the cause of ritualism. His views on social questions were the natural outcome of his fundamental religious ideas; and he firmty believed that political economy was not the foundation of morals and politics, but "must have them for its foundation or be worth nothing." 2

As a young man he had joined a debating club which had grown out of an Owenite society. But he had no sympathy with Owen's fundamental thought. He tells us that he never heard stronger testimony to the power of the will to regulate and command circumstances than came from these socialistic worshippers of circumstances.3 There was, indeed, little in common between the two: Owen, a rich, benevolent manufacturer, devoid of scientific training, a staunch rationalist, and forever harping on the one principle which was to produce a new society; Maurice, a

¹Cf. the masterly characterizations in Huber, Reisebriefe, ii., 16; Brentano, Schmoller's Jahrbücher, vii., 744. Cf. Ruskin, Fors Clavigera, letter 22, part iii., p. 311 (ed. of 1881).

^a Life of F. D. Maurice, i., 210.

^a Letter to Ludlow, Aug. 13, 1849.

deeply religious mind, equipped with all the culture of the generation, and able to separate the chaff from the wheat in economics. Owen was, in fact, a state communist. Maurice said expressly: "The state cannot be communist, never will be, never ought to be." But the church, he held, was communistic in principle, bringing into human society a spiritual fellowship, without which the state would soon degenerate into a mere stock-exchange.

In 1846, while professor at King's College and chaplain of Lincoln's Inn, he was solicited by a young lawyer, John Malcolm Ludlow, to aid in a scheme for bringing the leisure and good feeling of the Inns of Court to bear upon the misery of the neighbourhood. As a result, a close intimacy sprang up between the two men—an intimacy productive of important results; for Ludlow was soon to become a most ardent and energetic upholder of the new movement, and to supply practical plans for the realization of Maurice's lofty views.

The other great leader in the movement was Charles Kingsley, a young pastor at Eversley, by fourteen years Maurice's junior, and powerfully affected by the theological views of his friend. The two men were radically different in temperament. Maurice was mild, unobtrusive, averse from undue opposition, convincing by his example and his earnest logic rather than by appeals to the feelings. Kingsley was ardent, aggressive and enthusiastic, touching the heart rather than the head. Maurice had a deep, measured style; Kingsley wrote as he spoke, with sentences fervid, passionate, clear-cut. Both were men of transcendent ability; but Maurice was incomparably the superior in thoroughness of conviction, in repose of intellect, in talent for leadership. And yet, while different in these details of character, they possessed practically coincident views as to the nature and office of religion. An acquaintance with these views is indispensable to a just understanding of their social philosophy.

According to them the world is a manifestation of God's order, but the selfishness of man has produced a deviation from the original principles. "God's order seems to me more than ever the antagonist of man's systems," writes Maurice to a

¹ Life of F. D. Maurice, ii., 9.

friend.1 Far from egotism being the controlling motive of human existence, all that is good in the modern world has come from the principles of self-sacrifice and fraternal coöperation as outlined in Christian ethics. The reintroduction of an universal practical Christianity, in the noblest and widest sense of the word, can alone check the downward tendency and engender a veritable harmony of interests. The religion they strove to realize was that of the founder; their conception was a broad, human one. Vehemently opposing Calvinism and asceticism as removing mankind from a sense of its obligations in this world; asserting the moral impotence of the view which makes the hope of heaven or the fear of hell the sole determinants of human conduct; objecting equally to the Oxford Tractarianism, which they termed an aristocratic movement in the most carnal sense, "a system for saving the souls of fine ladies and gentlemen in an easy and gentlemanlike way" 2—they were reformers in the fullest sense of the word. The kingdom of Christ was to them no empty formula; they were thoroughly imbued with the belief that this kingdom, created through revelation, actually existed and was destined in time to subjugate all wickedness and misery. Society, according to them, is not to be made anew by arrangements, but is to be regenerated by "finding the law and ground of its order and harmony, the only secret of its existence, in God." 3 In speaking of the term Christian Socialism, they denied having adopted the word Christian merely as a qualifying adjective; they maintained that Christianity has the power of regenerating whatever it comes in contact with, of making that morally healthful which apart from it must be either mischievous or inefficient.4

This was the keynote of the whole movement—the ethical force of Christianity as the leaven of social reform. "Whatever doubt or doctrinal atheism you and your friends may have," wrote Kingsley, "don't fall into moral atheism. Don't forget the eternal goodness, whatever name you call it. I call it God." The Christian Socialists looked with consternation

¹ Maurice, Life, ii., 44.

² Kingsley, Letters and Memories of his Life, ii., 250.

Maurice, Kingdom of Christ, passim; Life, ii., 137.

⁴ Maurice, Life, ii., 92. ⁵ Kingsley, Letters, ii., 75.

upon the growing cleft between rich and poor, upon the cynical indifference of the one class, and the brooding discontent of the other; they sternly took the clergy to task for their supine inactivity, for squandering time in doctrinal quibbles and neglecting the paramount issues of the time. They strongly protested against the notion of turning the Bible into a book for keeping the poor in order. The Bible they considered, on the contrary, the poor man's book, the voice of God against tyrants. idlers and humbugs. It demands for the poor as much as, and more than, they demand for themselves: it expresses the deepest yearnings of the poor man's heart far more nobly, more searchingly, more daringly, more eloquently, than any modern orator has done. "Justice from God to those whom men oppress, glory from God to those whom men despise" is the thought which runs through the whole Bible. It is the poor man's comfort and the rich man's warning.1

This explains in part their name Christian Socialists. This is, indeed, not the place to consider how far they were justified in identifying all morality with Christian morality. Even as religious philosophers, however, the great step in advance which they took was to emphasize the ethics, rather than the theology, in the Christian teachings. Christians they certainly were. But, it will be asked, were they socialists at all: had they anything in common with socialism? Only in the wider sense, we answer. If by socialism we mean that system which, instead of saving "all mine is thine" says "all thine is mine," which is filled with envy and resentment, and preaches indiscriminate violence. which calls on the state as the sole solvent of social unhappiness and the sole regulator of economic relations, then they were indeed not socialists. But if by socialism we mean that principle which looks upon all human beings as members of one family and subject to one law, which regards the workingmen as endued with the same possibilities and worthy of the same opportunities as others, which sets up the idea of combination and universal cooperation in opposition to the anarchy of disunion and the shortcomings of competition, which, in short, seeks to develop those characteristics that bind mankind to-

¹ Politics for the People, May 21, 1848. "Letter to the Chartists," by Kingsley. Cf. Maurice, Letter to Kingsley, ibid., April 22, 1848.

gether and render them more conscious of reciprocal duties—then in this wider sense, they were indeed the truest socialists of the century. "I must have socialism, or rather humanity," writes Maurice, "recognized as a necessary element and condition of organic society." Their object was to separate that socialism which Southey and other conservatives believed to be the best solution of England's practical difficulties, from communism, red republicanism, or any anarchical opinion whatsoever, and to infuse into it the purest ethical teachings."

We can readily understand that men of such a stamp should view with a sovereign disdain the social doctrines of the Manchester school of political economy. "Of all narrow, conceited, hypocritical, anarchic and atheistic schemes of the universe, the Cobden and Bright one is exactly the worst." 2 To the Christian Socialists a Manchester ascendancy seemed a horrible catastrophe. And it cannot be denied that there were some reasons for their dread. When men like Senior, McCulloch and James Mill pushed the doctrine of self-interest to its ultimate logical issues, dogmatically asserted the immutability of supposed laws, frowned down all efforts of trade-unions to elevate their class, fought the endeavours of Parliament to curtail the abuses of the factory owners, and sheltered themselves under the wide mantle of absolute laissez faire; when the Anti-Corn-Law league was joined by the large manufacturers who ostensibly advocated cheaper bread for the operatives, but in reality hoped for lower wages and the crushing of the landed interest: when the utmost possible production of commodities was the beau idéal, and man as such utterly thrust into the background—then the epithet "the dismal science," or la science du néant, as applied to economics seemed almost justified. A century hence, thought Kingsley, mankind will be looking back upon the social philosophy of the present day, as they do upon the witch manias of our forefathers.8

¹ Maurice, Letter to Dr. Jelf, Politics for the People, Dec. 20, 1851. Of. Kingsley, Letters, i., 248. "We are teaching the workmen true socialism, true liberty, brotherhood and equality—not the carnal dead level equality of the communist, but the spiritual equality of the church idea, which gives every man an equal chance of developing, and rewards every man according to his work."

² Letter of Kingsley, cf. Hughes, Prefatory Memoir to Alton Locke, p. 51. ³ Letter to Bullar, Letters, ii., 36.

The Christian Socialists, however, did not object to political economy as such. Kingsley expressly stated that he did not join in the vulgar outcry against economics in general, as absurd and inhuman. He distinctly maintained that the future practical science must be built up more or less on the laws discovered by Adam Smith, Malthus and Ricardo, and that "to be a sound and scientific socialist, a man must first be a sound and scientific political economist." He believed and said that "political economy was all but the highest and most spiritual of sciences; the science of organizing politics. and of making men good citizens." But what he did deplore was the exaggeration and perversion of the half-truths of the earlier masters, which had become the entire stock in trade of superficial declaimers. For such men as John Stuart Mill. who believed that the last word in economics had not yet been said, and who were attempting to approach the labour question in a fair and unbiased spirit, the Christian Socialists entertained the highest respect; and they professed their entire willingness to be silent on any purely economic point, "and let their betters speak." But they strenuously protested against the doctrine of the prevalent school, which formed, so to say, a distortion of economics and, when confronted by accounts of most abject misery, answered that political economy had nothing to do with the matter, and that, if the supply of labour was equal to the demand, no material laws were infringed. Said Kingsley:

I expect nothing from a public press which panders to popular Mammonism by scraps of politico-economic cant, and justifies the ignorant miser to himself by retailing Benthamite phrases which sound like scientific laws while they are really nothing but the assertion of barren truisms. I expect nothing from the advocates of laissez faire—the pedants whose glory is in the shame of society, who arrogantly talk of economics as of a science so completely perfected, so universal and all-important that common humanity and morality, reason and religion must be pooh-poohed down, if they seem to interfere with its infallible conclusions, and yet revile, as absurd and utopian, the slightest attempt to apply those conclusions to any practical purpose. . . . The man who tells us that we ought to investigate Nature, simply to sit still patiently under her, and let her freeze, and ruin, and starve, and stink us to death, is a goose, whether he calls himself a chemist or a political economist.

¹ "Thoughts on the Frimley Murder, by Parson Lot." The Christian Socialist, Nov. 2, Nov. 16, 1850, vol. i., pp. 3, 18. Cf. Kingsley's criticism

3. Christian Socialism.

But now to the story of their work. The beginning of the year 1848 marked a crisis in English history, a dark period for the English workman. The bad harvests, the window tax, the potato famine, and the Chartist agitation (which had been long drawing to a head) threatened to produce serious disorders; when suddenly the February revolution in Paris acted as a firebrand thrown into the camp of popular discontent. Ireland was on the verge of rebellion, and severe riots occurred in many of the larger English towns. Ludlow, who had been educated in France and was well acquainted with the work of Buchez, the father of French cooperation,1 returned from a visit to Paris with the conviction that socialism had become a powerful factor in the national life. It must be Christianized, he writes to Maurice, or it will shake Christianity to its foundation, precisely because it appeals to the higher and not to the lower instincts of man.² He even desired to throw in his lot with the Parisians by starting a paper called La Fraternité Chrétienne, but was dissuaded by the thought that there was an ample field for earnest work at home. The famous "five million" Chartist petition had been handed in, and the call issued for an immense mass-meeting at Kennington Common, April 10. London was thrown into a ferment of excitement, and put under the military government of Wellington. Two hundred thousand special constables were sworn in, but the cloud of discontent became more and more lowering. Kingslev rushed down from Everslev in a state of intense agitation, burning with sympathy for the men, but most apprehensive of the results. At Maurice's house he met Ludlow, and together they walked to the common, where the pouring rain and the titanic energy of O'Connor prevented any outbreak. Quickly

of the economists in A Mad World, my Masters; and in New Miscellanies, p. 6.

¹ For an account of his work, hitherto almost neglected, see Hubert-Valleroux, Les associations co-opératives, en France et à l'étranger, 1884; and Engländer, Geschichte der französischen Arbeiter-Associationen, ii., chap. 24.

² Correspondence with Ludlow; Maurice, Life, i., 458 et seq.

it was decided to publish placards and to spread them broadcast, in order to allay the fevered minds of the malcontents. Kingsley wrote all night long, and on the morning of the twelfth his eloquent appeal to the workingmen of England appeared on thousands of posters:

Workmen of England, you say that you are wronged. Many of you are wronged, and many besides yourself know it. . . . You have more friends than you think for-friends who expect nothing from you, but who love you because you are their brothers, and, therefore, dare not neglect you. . . . You think that the Charter will make you freewould to God it would! The Charter is not bad if the men who use it are not bad. But will the Charter make you free? Will it free you from slavery to £10 bribes? Slavery to beer and gin? Slavery to every spouter who flatters your self-conceit, and stirs up bitterness and headlong rage in you? That, I guess, is real slavery—to be a slave to one's stomach, one's own pocket, one's own temper. Will the Charter cure that? Friends, you want more than acts of Parliament can give. Englishmen, Saxons, leaders of freedom for seven hundred years, men say you have common sense. Then do not humbug yourselves into meaning license when you cry for liberty. . . . Who would dare to refuse you freedom? But there will be no true freedom without virtue, no true science without religion, no true industry without the fear of God, and love to your fellow-citizens. Workers of England, be wise. and then you must be free, for you will be fit to be free.

This, and much more in stirring language, was signed "A Working Parson" and produced an immense impression. The danger of serious violence passed away, but the uneasy, excitable feeling had by no means completely subsided. Maurice, and the little band of friends who had been in the habit of meeting at his house weekly for discussion of kindred topics decided, at the suggestion of Ludlow, to start a penny weekly which should attempt to impress true ideas upon the people, and show them a way out of their difficulties. The list of writers for the Politics for the People, as it was called, was remarkable. In addition to Maurice, Kingsley and Ludlow, the chief contributors, we find articles by Archdeacon Hare, Professor Conington, Sir Arthur Helps, Archbishop Whately, Dr. Guy, French, Stanley, Osborn, and others equally noted in the literary world—a rare galaxy of brilliant minds. The columns moreover were opened to the Chart-

¹The placard, a copy of which lies before us, is reprinted in Kingsley's *Letters*, i., 156.

ists themselves.1 and contained many communications from their hands, among others one signed by "One of the wicked Chartists of Kennington Common." The first number teemed with admirable essays, Maurice explaining the object in a strong article on true fraternity.2 Those portions of the contents that perhaps gave rise to the greatest objurgations—for the writers were soon attacked on all sides by the periodical press-were the three letters to the Chartists from the pen of Kingsley under the pseudonym of Parson Lot.³ He confesses himself to be a radical reformer, but adds that his quarrel with the Charter is that it does not go far enough, and that it will certainly not give the workmen what they want. He tells them that they have fallen into the mistake of supposing that legislative reform is social reform, and shows that the Charter cannot make the rogues honest or the idle industrious. He accuses them of trying to do God's work with the devil's tools, and asks what is the use of brilliant language about peace and the majesty of order and universal love when it "runs in the same team with ferocity, railing, mad, one-eved excitement, talking itself into a passion like a street woman." He refers them again and again to the Bible, as the true reformer's guide, and pleads the cause of religion in glowing terms.4

Notwithstanding the admirable array of contributors, the paper was discontinued after seventeen numbers for lack of support, although it had attained a circulation of two thousand, and won many of the workmen over to its point of view—principally through the efforts of Walter Cooper, the Chartist tailor, who was soon to lend them considerable aid. Ludlow tells us that the editors, themselves victims of the fearful class estrangement which they came together to break down, did not at first know a single workingman who would read what they wrote. And yet when the paper ceased to exist, the lurking

¹ Cf. the letters of Thomas Shorter, and Millbank.

² Politics for the People, no. 1, May 6, 1848.

^{*}At one of the weekly meetings mentioned above, Kingsley, whose logic was of a rather aggressive kind, happened to oppose all the others, and laughingly said that he felt much as Lot must have felt in the cities of the plain when he seemed "as one that mocked to his sons-in-law." From that day he was nicknamed Parson Lot, and for years used no other signature. Cf. Hughes, Prefatory Memoir, p. 5.

*Politics for the People, no. 2, p. 28; no. 4, p. 58.

distrust of the workmen that the editors were actuated by some sinister designs was, perhaps because of its failure, utterly removed and many warm personal friendships had been formed. They failed, but with the words of hope upon their lips.¹

The friends, including Mansfield, Campbell, Furnival, Ellison, and Lord Goderich (afterwards governor-general of India under the name of Earl de Grey and Ripon), far from disbanding, continued the meetings at Maurice's house all winter, and under his guidance started night schools for workingmen and girls in the worst districts, such as Little Ormond Yard, visiting and teaching in person, often under the most adverse conditions, and taking the ragged boys on picnics to the country.2 Their influence was already great. In the spring of 1849, Walter Cooper, who had been attending several of Maurice's sermons, encouraged the friends to hold public meetings for the workmen. The Chartists were accordingly invited to attend weekly conferences at Cranbourne tavern, where many an eloquent address was delivered under the presidency of Maurice, as guiding spirit. By this time Thomas Hughes, who on being suddenly confronted with the squalour of London life had almost become a physicalforce chartist, now joined the movement and became one of its ardent apostles.3 Shorter, Ebenezer Elliott, and other Chartist leaders were regular attendants, and it was at one of these conferences that Kingsley made his celebrated speech beginning: "I am a Church of England parson and a Chartist," in which he acknowledged the grievous wrongs of the workmen but dissuaded them from violence.4

^{1&}quot;When it was seen that their attempt was really no rich man's conspiracy to coax or bully the workingmen out of their rights or out of their hopes, but the sincere endeavor of a few men to see and speak the truth, then indeed their true success began, in the regret manifested by many workmen." Cf. the cloquent retrospect of Ludlow in The Christian Socialist, no. 10, Jan. 4, 1851, vol. i., p. 73.

³ For an account of the work, and the joy of the ragged urchins, see the article by Furnival in *The Working Man's College Magazine*, ii., 144 (September, 1860).

³ Maurice tells an amusing story of the remarks made by some of the members when Hughes' name was suggested: "Oh, you will get no good from that quarter; he will be no good for teaching; a very good fellow for cricket and that sort of thing." Life, i., 483. The author of Tom Brown's School Days soon disclosed other characteristics.

⁴ Hughes, *Prefatory Memoir*, p. 16. There are a few anachronisms in this memoir. The date on p. 16, e.g., should be 1849, not 1848, as appears from Kingsley, *Letters*, i., 205.

At this juncture a series of letters by Mr. Mayhew on London labour and the London poor appeared in one of the daily papers. These letters—especially those on the condition of the working tailors 1-disclosed a depth of misery hitherto deemed inconceivable. There were, as appeared from the testimony of the workmen themselves at two crowded meetings called by the metropolitan commissioner, two distinct classes of shops among the tailors: the honourable trade in the West End, comprising a few shops where the workmen were employed on the premises; and the dishonourable trade of the show or slop-shops, which comprised about five-sixths of the whole number, and employed over 21,000 workmen. At these slop-shops with their meretricious fronts and plate-glass windows, the lowest possible wages were paid, but not to the tailors themselves. The work was entirely let out to contractors or "sweaters." as they were expressively called, and by them again to a second, third, or fourth sweater, who finally engaged to find the workmen; and it can readily be imagined how small a pittance was left after the repeated deductions of the sweaters' profits. But this was not the worst. As all the work was piece work, the sweaters insisted on the attendance of more tailors than the supply of work warranted, claiming that there was no telling when a new order would come in. The miserable labourers were thus compelled to go half the time without any work at all, and to take their meals, and often reside, in the sweater's house. From that moment they were doomed. The pittance they received was soon swallowed up by a series of systematic exactions. Outrageous prices were demanded for the most filthy and insufficient food, the rent was extortionate, and all manner of petty fines were imposed, so that the poor wretches instead of earning a penny continually fell behind. They were literally stripped of everything, until it was common for half a dozen men to have only one coat between them—the so-called "reliever"—permitting only one to go out at a time. But the condition of most was still more horrible. As they fell into arrears they were cooped up, six and ten at a time, in a miserable dark hole which served

¹ The Morning Chronicle, Dec. 14, 1849. In the work of Henry Mayhew, London Labour and the London Poor, 4 vols., London, 1861, many interesting facts are collected.

as both work and bed room, and in this fetid, reeking atmosphere, half-stifled and half-starved, they were consigned to a perpetual imprisonment, to a real and lasting slavery. Emaciated, diseased and starved, thousands of these poor wretches endured a living death, the horrors of which are indescribable and which were only faintly portrayed in the testimony of the tailors themselves. Even the government was much to blame, for it practised the contract system to a large extent, and thus directly contributed to the continuation of this revolting state of affairs, while the slop-shops were patronized by the finest noblemen and even by the clergy.

Kingsley's soul was stirred to its utmost depth by these harrowing revelations, and in a storm of indignation he wrote that famous pamphlet, Cheap Clothes and Nasty, which begins in this wise:

King Ryence, says the legend of Prince Arthur, wore a paletot trimmed with kings' beards. In the first French revolution (so Carlyle assures us) there were at Meudon tanneries of human skins. Mammon, at once tyrant and revolutionary, follows both these noble examples—in a more respectable way doubtless, for Mammon hates cruelty. . . . So he shrieks benevolently when a drunken soldier is flogged, but he trims his paletot and adorns his legs with the flesh of men and the skins of women, with degradation, pestilence, heathendom and despair; and then chuckles complacently over the smallness of his tailor's bills. Hypocrite! straining at a gnat and swallowing a camel. What is flogging or hanging, King Ryence's paletot or the tanneries of Meudon, to the slavery, starvation, waste of life, year-long imprisonment in dungeons narrower and fouler than those of the Inquisition, which goes on among thousands of free English clothes-makers at this day?

And then he proceeds to describe the situation in all its horrors, and to take the government and the wealthy to task for permitting such a thing to exist. In all literature we know nothing to be compared with this soul-stirring pamphlet, unless it be the burning wards of Les paroles d'un croyant, by De Lamennais. Kingsley's essay as well as an article by Ludlow in Fraser's Magazine,² in which a similar state of affairs was shown to exist

¹Reprinted as no. 5 of *Tracts by Christian Socialists*, and again in Eversley's edition of *Alton Locke* (1881), pp. 76-109.

³ January, 1850, Labour and the Poor, reprinted as nos. 3 and 4 of Tracts by Christian Socialists (a series which followed the Tracts on Christian Socialism). Cf. p. 6 for the affecting testimony of the young girls driven into prostitution through want.

among the working girls, created intense excitement, and all kinds of palliatives were put forth. Sydney Herbert and Ashley wrote letters proposing emigration as the only remedy, but were answered by Lord Mansfield, one of the little band of trusty friends who now resolved to take a determined stand. Ludlow, who had been in Paris and witnessed the situation of the associations ouvrières, returned with an enthusiasm for the cooperative workshops, and found no difficulty in winning Maurice over to his views, thus gaining for himself the credit of initiating the practical movement. A dinner had been given at Ludlow's in December, 1849, at which the plan was formulated. It was decided to issue a number of pamphlets,1 and it was then that the name Christian Socialism was adopted. "That is the only title which will define our object and will commit us at once to the conflict we must engage in sooner or later with the unsocial Christians and the unchristian Socialists." 2 And yet it was not without some misgivings. Vansittart Neale, then a young man, and later the soul of the cooperative movement in England, expressed his dislike of the name as tending to alienate many would-be supporters; but the objection, although doubtless well founded, was overruled.3

4. Socialism and Coöperation.

Maurice wrote the first tract, in which he asserts that any one who recognizes the principles of cooperation as stronger and

² The following were the Tracts on Christian Socialism:

No. 1. Dialogue between Somebody (a person of respectability) and Nobody (the writer).

No. 2. History of the Working Tailors' Association.

No. 3. What Christian Socialism has to do with the Question at present agitating the Church.

No. 4. The Working Associations of Paris.

No. 5. The Society for promoting Workingmen's Associations. No. 6. Prevailing Idolatries or Hints for Political Economists.

No. 7. A Dialogue between A and B, two clergymen, on the Doctrine of Circumstances, as it affects priests and people.

No. 8. A Clergyman's Answer to the Question, "On what grounds can you associate with men generally?"

Maurice wrote nos. 1, 3, 7, 8; Ludlow, nos. 4, 6; Hughes, no. 2.

Life of Maurice, ii., 34. The name "Christian Socialist" had first been used by T. H. Hudson, Christian Socialism explained and contrasted with Infidel Fellowship as propounded by Robert Owen. London, 1839. Several societies of Christian Cooperators had, however, existed in 1830.

² Cf. the remarks in Holyoake, History of Cooperation, ii., 390.

truer than those of competition, is justly called a socialist, and admits that the adherents of Owen, Fourier and Louis Blanc. fall within this definition. In later tracts he completely refutes Owen's views of circumstances, and discusses the relation between socialism and the church. Thousands of copies were struck off and widely distributed. But mere words were not enough. A few hundred pounds were raised, the friends rented a house in Great Castle Street, took a mortgage on the premises. and the Working Tailors' Association was started, with twelve tailors, under the leadership of Walter Cooper, the ex-Chartist. All moneys loaned were to be repaid into a fund to enable other societies to spring into existence. Wages were proportioned according to work and talents; but the profits were equally divided, provided that each man did his utmost, the ultimate decision being placed in the hands of the workmen themselves.1 Men of other trades saw that here was a way out of their difficulties, and applied for similar aid; and as a result, the Society for promoting Workingmen's Associations 2 was established in February, 1850, the friends, together with a few workmen, forming the "council of promoters" which met weekly at Maurice's house. Soon other associations were started, until they reached the number of seventeen in London alone, while the movement spread to the provincial cities, until finally a central board was formed with delegates from all the societies. Not much later the central coöperative agency was inaugurated, a pioneer and forerunner of the wholesale society which to-day transacts an immense business with over one thousand associations throughout England.3

Thus for a second time socialism had identified itself with coöperation. But to the Christian Socialists coöperation was the quintessence of principles inculcated by the church, the destroyer of that competition which they regarded as an unhallowed warfare. "Competition," said Maurice, "is put forth as

¹Report of Committee . . . on Savings of the Middle and Working Classes, p. 56.

² In the tract defining its objects, it was prescribed that none of the associations should ever be made the instrument or agent of political agitation. This strikes the keynote of their policy. *Tracts on Christian Socialism*, no. 5.

³ Ackland and Jones. Workingmen Coöperators, ch. 4.

the law of the universe. That is a lie. The time is come to declare that it is a lie, by word and deed. I see no way but by associating for work instead of for strikes." Kingsley maintained that not self-interest, but self-sacrifice, was the only law upon which human society could be grounded with any hope of success. "That self-interest is a law of human nature, I know well. That it ought to be the root-law of human society, I deny, unless society is to sink down again into a Roman empire and a cage of wild beasts." 1 The enthusiasm of the promoters was unbounded. Hughes thought (and continued to think so until his death) that they had found the solution of the labour question; but at that time he was also convinced that "we had nothing to do but just to announce it and found an association or two, in order to convert all England and usher in the millennium at once, so plain did the whole thing seem." 2 And the majority of the promoters were equally sanguine. Their success, indeed, was at first phenomenal. Kingsley had emphasized the fact that it was by securing custom, far more than by gifts or loans of money, that the nobility could help the operatives;3 and this indeed took place. The members of the original association soon tripled in number, and the outlook appeared most favourable. The labourers themselves were astonished to find that members of the upper classes sympathized with them; "the opinion has been that we are simply to be used as so many machines, and then to be thrown off when not needed, and that the other classes cared nothing about us." 4

During the autumn of 1850, Walter Cooper had made two tours through the northern counties, spreading the principles of productive coöperation. In January, Maurice, Hughes and Lees started out on a similar journey, and met with signal success, for the idea was eagerly adopted in many large towns—Manchester, Southampton, and others.⁵ The promoters, moreover, were astonished to find how many societies had preserved

^{*}Letters, ii., 37.

Memoir of a Brother, p. 111.

^a Cheap Clothes and Nasty, p. 107 of reprint.

^{*}Report of the Nelect Committee, etc., p. 54. Testimony of Walter Cooper.

⁶ Even in America the impulse was felt, and Associative Unions were started. Ludlow, Labour and the Poor, p. 16; The Christian Socialist, i. 45, etc.

their existence from the Owenite epoch, and as a result of the impulse given by the Rochdale pioneers in 1844. Maurice was still the life of the movement, and every incipient society applied to the promoters for information and aid, although they often found it difficult to harmonize conflicting views and to extirpate the "dividing, godless, warring tendencies" in each heart. But they now experienced the necessity of some organ to voice their sentiments in a more continuous and permanent shape; and in the autumn of 1850, the publication of The Christian Socialist, a weekly under the editorship of Ludlow, was undertaken with about the same body of eminent contributors as its predecessor. In this most remarkable journal, the motives of the founders are most clearly expressed:

A new idea has gone abroad into the world. That Socialism, the latest-born of the forces now at work in modern society, and Christianity, the eldest-born of those forces, are in their nature not hostile, but akin to each other; or rather, that the one is but the development, the outgrowth, the manifestation of the other. . . . That Christianity, however feeble and torpid it may seem to many just now, is truly but as an eagle at moult; that Socialism is but its livery of the nineteenth century, which it is even now putting on, to spread erelong its wings for a broader and heavenlier flight. That Socialism without Christianity, on the one hand, was lifeless as the feathers without the bird, however skilfully the stuffer may dress them up into an artificial semblance of life. That every socialist system which has maintained itself, has stood upon the moral grounds of righteousness, self-sacrifice, mutual affection, and common brotherhood. . . . That Christianity, on the other hand, in this nineteenth century of ours, becomes in its turn chilly and helpless when stripped of its social influences; or, in other words, when divorced from Socialism. . . . That if the Gospel speaks true, and "ye cannot serve God and Mammon," it is wholly incompatible with a political economy which proclaims self-interest to be the very pivot of social action; ... but that it is compatible with those theories or systems which have for a common object to bind up into fellowship, and not to divide by selfishness and rivalry; to substitute fair prices and living wages for a false cheapness, and starvation, its child; and which have adopted for their watchwords Association and Exchange instead of Competition and Profit. . . . If it be given us to vindicate for Christianity its true authority over the realms of industry and trade, for Socialism its true character as the great Christian revolution of the nineteenth century, so that the title of Socialist shall be only a bugbear to the idle and to the wicked, and society from the highest rank to the lowest shall avowedly regulate itself upon the principle of cooperation, and not drift rudderless upon the sea of competition, as our let-alone political economists would have it do—then, indeed, we shall have achieved our task; and no amount of obloquy, ridicule, calumny, neglect, shall make us desert it, so long as we have strength and means to carry on the fight. For a fight it is; and a long one, and a deadly one—a fight against all the armies of Mammon.

Kingsley had previously written The Saint's Tragedy, in which he touched upon some weak features of the prevalent political economy.2 as well as the novel Yeast, in which the misery and aspirations of the agricultural labourers were well portrayed. Now, however, he published his famous Alton Locke, the fictitious biography of a tailor-poet who works himself up from a position of lowly surroundings; and we should advise all who profess sympathy with the oppressed, who need quickening inspirations from noble thoughts, who desire emancipation from petty social prejudices, who wish to see formulated the better impulses of sturdy workmen, to take up this book, instinct with poetic fervour and full of passionate enthusiasm. It is the best text-book of Christian Socialism, and contains the most scathing denunciations of upper-class indifference. But it appeared at a time when a storm of vituperation and abuse burst on Parson Lot and his fellow-workers. "Tracts full of raving and disreputable rant; mouthpieces of class-selfishness, popular prejudice and ignorant passion; ravings of blasphemy, rapine and nonsense; miserable delusions; mischievous provocations clothed in oily phrases of peace and charity; a clique of wayward-minded men who, for a morbid craving for notoriety or a crazy straining after paradox, have taken up the unhallowed task of preaching the doctrines of Jacobinism and the Jacquerie" -this and much more of the like was said of them in all the

¹ "The New Idea," by Ludlow, *The Christian Socialist*, vol. i., no. 1, Nov. 2, 1850; cf. "My Political Creed," by Parson Lot, in vol. i., p. 50.

² Act ii., scene 9.—There were several workmen-poets connected with the movement, as Thomas Cooper (cousin of Walter Cooper, the tailor), the author of Purgatory of Suicides, and Gerald Massey, who wrote the Ballad of Babe Christabel, and who was secretary of the Working Tailors' Association. Of. his poems, etc., in The Christian Socialist, i., 48, ii., 140. England has had many other workmen-poets, as, e.g., Samuel Bamford the radical; Willie Thorn and John Crichley Prince, the weaver-poets; and Will Whitmore, the author of Gilbert Marlowe. Of. Workingmen's College Magazine, i., 143.

reviews and journals.1 Advertisements were refused by the daily papers, booksellers did not dare to keep copies of their publications, and The Christian Socialist was prohibited by the French government from circulating in the realm. A committee of King's College was appointed to investigate Maurice's activity in these dangerous schemes, and he narrowly escaped losing his professorial position. Kingsley was invited to deliver a sermon² in a London church, and at the close, his opinions were openly branded as untrue and dangerous by the officiating rector, Mr. Drew. Replies were made to the strictures in dignified, trenchant articles, showing that this was a crusade not of violence, but against violence; not of revolution, but of reform.3 One attack, however, of an extremely bitter nature. accusing the author of Yeast of purposely inculcating profligacy, was met by Kingsley as follows: "If you or any man impute to me these offences, I will answer you as was answered to the Jesuit of old-mentiris impudentissime." Perhaps the best purely economic reply was that of Ludlow, whose lecture displayed an intimate acquaintance with economic literature, and met the economists on their own ground. Here for the first time do we find a successful refutation of the wages-fund theory, which was not finally abandoned by the English economists until several decades later. Ludlow calls attention to the human element in the relation of capital and labour, as materially affecting the law of supply and demand; he asserts that a cheap-

¹ Cf. especially an article by Greg, "English Socialism and Communistic Associations," Edinburgh Review, Jan. 1851; J. W. Croker, "Revolutionary Literature," Quarterly Review, Sept., 1851; Holyouke (who subsequently recognized their merits) in The Reasoner; The Inquirer, April 19, 1851; The Eelectic, vol. 23, p. 508.

² "The Message of the Church to the Labouring-men." The closing words were as follows:

[&]quot;All systems of society which favor the accumulation of capital in a few hands, which oust the masses from the soil which their forefathers possessed of old, which reduce them to the state of serfs and day-labourers living on wages and alms, which crush them down with debt or in any wise degrade or enslave them, or deny them a permanent stake in the commonwealth, are contrary to the kingdom of God. . . . Woe unto you that add house to house and field to field, till there be no room left. Woe unto you that are full, for you have received your consolation already. Woe unto you who make a few rich to make many poor. Woe unto you that make merchandise out of the needs of your brethren."

^{*}Kingsley, "Who are the Friends of Order?" 1852; and the articles of Furnival, Maurice, Ludlow, et al., in The Christian Socialist, i., 98, 114, 122, 130, 227, 257; ii., 17.

ness which starves the producer is as absurd as a dearness which deters the consumer—an argument which, by the way, can be found already in the works of Boisguillebert and Turgot. Finally he attempts, although not with complete success, to answer the objection that in case there are many associations, you retain all the evils of competition; in case they are all merged into one, you encounter all the evils of monopoly. Ludlow confessed that it would result in a monopoly, but it would be a monopoly of order and justice, not of disorder and injustice. The monopoly they were seeking was one which, instead of narrowing, sought only to extend its circle, and would not cease widening until it had taken in the whole world 1—a project which we must declare to-day to be rather overidealistic.

In fact, it cannot be denied that the perhaps justifiable indignation of the friends against the prevailing economic doctrines led them into a too vehement opposition. There is no doubt that their at times passionate indiscretion repelled many who were at heart in sympathy in the movement. In denouncing unrestricted competition, and the economic doctrine of "every man for himself," it was quite unnecessary to speak of the whole system of trade as the "disgusting vice of shop-keeping." 2 The economists were termed by many of them superficial and supercilious plutonomists; while others spoke of that ape-like snatching from one another which we call competition, but which is the anti-social, disintegrating, destructive principle. Men are not apes, said they, and it is but apes' jabber to tell them that competition is the law of the universe.3 Such language was perhaps excusable in the face of those who held that absolute laissez faire would bring about a harmony of interests, a state of universal bliss, and who euphuistically called their political economy "benevolence under the guidance of science": 4 and it is beyond cavil that the arguments of the friends ultimately produced a veering round in public sentiment. But a sober

¹ "Christian Socialism and its Opponents." The substance of the lecture is reprinted in *The Christian Socialist*, Feb. 22, 1851.

² Cf. the remarks of Hughes, Memoir of a Brother, p. 114. ³ The Christian Socialist, ii., 34; The Spectator, vol. 57, p. 1339. ⁴ Edinburgh Review, Jan. 15, 1851, p. 9.

scientific judgment must convict them of exaggeration. Free competition is not all good, nor is it all bad. It has called forth all the self-reliant individual energy to which the marvellous growth of our present civilization is due; it has served as the spur to progress and has equalized many a hardship. On the other hand, it has worked much injustice, and given rise to untold abuses; it has intensified the advantages of the strong and unscrupulous in the conflict with the weak and honourable; it has proved itself incapable in many instances of satisfactorily solving the great problems of our complex industrial society. But competition is not such a failure as to warrant the demand of its utter annihilation, whether by the collectivists or the cooperative socialists. It is a legitimate principle of modern economic life, whose shortcomings may here and there be compulsorily remedied, but which must still remain the predominant characteristic of social relations. The old extremists erred in absolutely denying that it had any shortcomings, the Christian Socialists erred in desiring to supplant it entirely and immediately. Both were wrong; and it is the province of modern economics to mark out the lines of delimitation between their respective demands.

The legal members of the council of promoters had already for some time been striving for a change in the law of partnership which would afford the coöperative societies an adequate protection. The character of English legislation up to that time had been anything but favourable to independent action on the part of the workmen; and coöperation was as yet illegal, or at least beyond the law. After the report of Slaney's parliamentary committee in 1850, before which J. S. Mill had spoken an earnest word in behalf of the scheme, Ludlow drafted a bill subsequently settled in conjunction with Hughes and Neale; but it required two years of determined and strenuous effort before their object was finally attained by the act of June 11, 1852, which has been called the magna charta of coöperative trade

¹"I think there is no way in which the working classes can make so beneficial a use of their savings, both to themselves and to society, as by the formation of associations to carry on the business with which they are acquainted, and in which they are themselves engaged as workpeople." Cf. pp. 71-81 of Report. Mill was prevented from joining the movement only on account of its specifically Christian character.

and industry—the first law in the civilized world that recognised and protected coöperative societies as separate entities.

The remainder of the work can be told in a few words. In January, 1852, The Christian Socialist was replaced by The Journal of Association, which Hughes undertook to edit, and which now dropped all articles of a political or general nature and devoted itself wholly to the cause of cooperation. The society modified its name to accord with the new law, and was henceforth known as the Association for Promoting Industrial and Provident Societies, the new constitution formulating its principles as follows: 1. That human society is a body consisting of many members, not a collection of warring atoms. 2. That true workmen must be fellow-workers, not rivals. 3. That a principle of justice, not of selfishness, must govern exchanges.2 At the time of the great strike and lock-out of the amalgamated society of engineers in 1852, the friends sturdily opposed the current of abuse and calumny that threatened to engulf the labourers, and by their letters to the Times succeeded in bringing about a more temperate view of the real aims of the tradesunions, thus materially contributing to their advance. The conferences with the artisans were still carried on, and the cause of cooperation in the country districts was greatly strengthened. Annual congresses were held in London, Manchester, Leeds and other cities, and as a result of their activity so-called labourredemption societies were formed in Leeds and Bury, which maintained the principle that the workmen must become "labouring capitalists." 3 But toward the close of 1853 the difficulties, inherent in every scheme of coöperation, made themselves apparent, and the productive societies in London began to decline: several were robbed by their treasurers; others

¹The Industrial and Provident Partnerships Act, June 11, 1852, 15 and 16 Vict. c. 31, applying to all occupations except mining and quarrying abroad, and banking. The present law is that of 1876, 39 and 40 Vict. c. 45. Cf. Ludlow and Jones, Progress of the Working Classes, p. 48. In a letter to the present writer, Mr. Ludlow states that there would probably have been serious opposition to the bill had any other name been adopted.

² Hughes, *History and Objects of Cooperation*, p. 13. The number of members was now seventy, among them seven lawyers, seven ministers, two M. P.'s, and two peers (Viscount Goderich and Lord Montagu). *Cf.* Huber, *Reisebriefe*, ii., 171.

^a Of. for their principles, and the projected "fourteen days propagandism," The Christian Socialist, i., 54; ii., 41.

suffered from a jealous dissension of the members, and the spirit of envy and indifference began to supplant that of fraternal love and mutual toleration. One of the members of the general association, Jules Chevalier, initiated a rival movement of his own, and thus hastened the frustration of the original plans. The remaining societies were still supported by the large-hearted generosity of Vansittart Neale, but even his purse was soon emptied. Maurice and his friends felt that the impulse had been given, that they were not competent to carry on the practical details but might, on the contrary, mar the cause grievously by continuing to meddle with the strictly commercial part of the movement. Neale and the Coöperative League, moreover, had occupied, to some extent, the ground originally taken by the promoters.

It was accordingly decided to establish an institution in which the workmen should gradually be educated to a higher and nobler conception of their social relations. The organization was finally perfected, according to a plan of Maurice ² and, early in 1854, the nucleus of teachers was obtained for the Workingmen's College, which counted among its lecturers in that and the following years some of the most distinguished names in English science and literature.³ The promoters devoted all their enthusiasm to the prosecution of this scheme, and the coöperative movement in London consequently languished. Instruction was given in all the higher as well as the elementary branches, a periodical was published devoted to its interests,⁴ and to-day the college still exists, as one of London's most prosperous and beneficent institutions, recruiting the staff of instructors largely from its former pupils, and serving as a

⁴The Workingmen's College Magazine, 1859-1861, edited first by Ludlow, afterwards by Litchfield.

¹ Jules Chevalier St. André, a French refugee, and called by Maurice a clever sharper, *Life*, ii., 549. But see Huber, *Reisebrucfe*, ii., 168, for a more favourable account.

² Reprinted in The Workingmen's College Magazine, ii., 146 et seq.
³ Ruskin, Dante Rosetti, Alex. Munroe, Fitz-James Stephens, Frederick Harrison, Sheldon Amos, Grant-Duff, Pearson, Brewer, the Lushingtons, Westlake, Brodribb, Huxley, Tyndall, Spottiswoode, etc. Cf. Reports of the Workingmen's College. The college bore some resemblance to the People's College established in Sheffield in 1842 by a dissenting minister, Mr. Bayley. For a history, of the latter by Rowbotham, see The Workingmen's College Magazine, i., nos. 4 and 6. The history of the London College itself is told by Furnival, ibid., ii., 144, 165, 188.

model to the numerous academies of a similar character, that have sprung up in English towns.¹

The friends in later years worked with unflagging zeal in the interests of the workmen: Maurice and Kingsley in their clerical careers never failed to utter words of cheering import; Ludlow wielded his powerful pen in defence of the operatives, and later became registrar of the friendly societies; Hughes and Neale remained the staunch supporters of coöperation in England, and preserved the ideal element that continued to characterize the movement for many a day: but the Christian Socialist movement, as an episode of the national life, practically ended in 1855.

In these seven years of energetic activity a great transformation had been effected. The Christian Socialists had indeed failed to achieve the practical object which they had set themselves; the seventeen productive societies in London had all vanished, and the coöperative stores in the country were upheld only by the success of the Rochdale pioneers. Society was still far from conforming to the ideal of true love and fraternity for which Maurice and his followers had so earnestly striven. Kingsley confessed that the associations were a failure because the workingmen were not fit for them,³ and Vansittart Neale in a letter to the present writer says:

Individually, the only matter that I regret in respect to my connection with this movement, is that I was in too great a hurry. Led away by the enthusiasm produced by the efforts of the Parisian workers to raise themselves by their united efforts, I advanced considerable sums to various bodies of workers, who were to have all the profits of their work after paying three per cent on the capital; but had the misfortune of losing the capital without having succeeded in setting up one society

Ludlow and Jones, Progress of the Working Classes, p. 178; Maurice, The Workman and the Franchise, at end. The colleges of Salford, Manchester, Ancoats, Wolverhampton, Cambridge, Halifax, Boston, Ayr, are described in the College Magazine, i., 17, 21, 41, 51, 53, 101; ii., 82; iii., 101.

In a letter to the writer, Mr. Hughes says: "The man here who holds the ropes (may he long do so!) is Mr. Vansittart Neale. . . . He is the finest instance I know of a highly cultivated gentleman absolutely devoting himself to the greatest cause of our time, without a hope of reward in fame or wealth of any kind." Not much less praise is due to Mr. Hughes himself. In the Manual for Cooperators, pp. 1-72, 154-169, Hughes and Neale again discussed the subject from their old standpoint.

Letters, ii., 35.

which lived; and, in consequence, only crippled my own power without benefiting permanently those whom I desired to benefit.1

And yet much had been accomplished indirectly. Legislative reform had been initiated in the face of bitter opposition. and the ultimate success of coöperation was no longer imperilled by a legal environment which had made all previous attempts so futile. Public sentiment had been aroused by the combined onset of such a singularly brilliant body of authors, and the attitude of the reviewers and the higher classes in general had changed from one of contumely and obloquy to that of respectful appreciation and even approbation. One of their former severe opponents now thought that the associations might become one of the most powerful influences working for the education of the lower orders of the people; and the general effect of the controversy was to convince the public that the movement was neither revolutionary nor dangerous, but calculated to open a future for the working classes such as they had hitherto scarcely dreamt of.2 Mr. Ludlow states in a letter to the present writer:

I do not think it is for me to say how far Christian Socialism has or has not been a success. I believe I can see its influence working far and wide—and not in this country only—in many who are quite unconscious of the fact. All I would say is that it is a mistake to look upon Christian Socialism as a mere historical event or series of facts. It was a leaven—that is, as modern science teaches us, a living germ capable of reproduction ad infinitum.

But above all, their repeated attacks on the exaggerations of the orthodox economists, and their demonstration of the untenableness of a system based on the assumption of natural laws as an outcome of the principle of self-interest, gradually produced a revulsion of feeling and a sense of growing dissatisfaction with the doctrines of the Manchester school, which finally culminated, only a few years ago, in their rejection by the English scientists. The economists, with the honourable excep-

¹ Mr. Neale believed that Godin's establishment at Guise offered the best

solution of the problem for the present day.

2 "Investments for the Working Classes" (by W. R. Greg), Edinburgh Review for April, 1852, p. 413. Cf. Hughes, History and Objects of Cooperation, p. 16. 11083

tion of Mill, had regarded the movement as hopeless, inadequate and utterly erroneous; several decades later there was scarcely an English economist of note who had not become convinced of its ultimate practicability and its undeniable value in helping to solve present burning problems. The London associations have disappeared; but the efforts of the Christian Socialists remain apparent in the momentum given to the growth of the country societies, which have gradually developed into a huge network of unions throughout the kingdom. But for the Christian Socialists and their vigorous advocacy, the cause of coöperation would to-day be far less hopeful, far less beneficent.

5. Conclusion.

Owen and the Christian Socialists thus each performed a great work, both negative and positive, even though their practical schemes, with few exceptions, failed of any direct success. Positively, they succeeded in moulding the views of their generation, in producing a spirit of greater toleration, in combating the patent evils and abuses of an unrestricted competition, in deprecating the further continuance of such an unhallowed industrial warfare, in stimulating the energies of apathetic legislators and in inciting them to supply defects in the laws which affected the status of the labouring classes. Negatively, they exerted an incalculable influence in preventing outbreaks of class hatred and dissipating the feelings of imagined superiority or sullen resentment; in recalling to each the sense of mutual obligation, and insisting on the maintenance of order; in spreading the gospel of fraternity and peace, and deriding the thought that mere legislative reform would suffice to regenerate society. They started from essentially different premises, and yet, in some respects, reached identical conclusions. From the state they demanded very little that militated against the commonly accepted notions. The state socialism of the present day would have seemed to them absurd and utterly futile: for voluntary, not compulsory, organization was their watchword; peace and good will to all, their battle cry. Owen was a rationalist, but not a materialist. Maurice and Kingsley were Christians, but their Christianity was a liberal humanitarianism.

the ultimate result of which must be, as they said, to merge the present distinctions of theology in the unity of a moral life; a catholic faith which includes in its folds all those who, whether repudiating the name of Christians or not, are actuated by a spirit that makes social reform possible. Owen was a visionary, one-sided enthusiast; the Christian Socialists were broadminded and full of scientific ability. Owen was a communist, and later a spiritualist; Maurice and Kingsley insisted on the right of property, as well as on the duties of proprietors. Owen dabbled in economics and made laughable failures; the others were careful in their experiments, and often content with the enunciation of new principles. Owen believed that the result at which he aimed could be reached by advocating the quintessence of ethics taught by all great religious teachers; the Christian Socialists held more firmly to the doctrines of the church. But all finally reached the same standpoint: "Whatsoever ye would that men should do to you, do ye even so to them."

English Socialism, as exemplified in these two great phases, thus possesses three distinguishing characteristics: opposition to violence, refusal of state-help, enthusiasm for coöperation. The first feature—the insistence on the necessity of reform rather than of revolution—is owing to the fact that the leaders were neither demagogues nor sciolists. Their systems were based on a philosophy; but in each case it was a philosophy of love and toleration—an optimism which, though not blind to existing defects, yet firmly held that the good in human nature would ultimately overpower the bad—a conviction that mob force and passionate recrimination would be impotent to bring about a harmony of interests, and that distrust and hatred could not possibly engender confidence and satisfaction.

Secondly, they resolutely set their faces against undue reliance on governmental intervention; and in this they showed their sturdy English independence. Not that they were advocates of the *laissez faire* Manchester doctrine; on the contrary, they repudiated with vehemence the absolute sufficiency of self-interest. They demanded an exercise of the police power which should prevent disregard of health and decency, and which should adequately protect the industrial population from the flagrant abuses of the factory system. But they desired no undue com-

pulsion; they foresaw that the habit of calling upon the state in every emergency would sap the foundations of manly initiative; they preferred to regenerate society from within, not from without, and to put their trust in the spontaneous action of groups voluntarily and earnestly working for a common end.

Finally, they effectually promoted the cause of cooperation. both productive and distributive. Starting from different standpoints, they all reached the same conclusion, that combination. and not competition, was to become the keynote of the new They doubtless charged the competitive system with much that cannot with justice be laid at its doors; they assailed existing methods with purely ethical arguments; their sympathetic indignation often led them to overstep the limits of just criticism. Owen was far too extravagant in his conception of coöperation, which he wished to see practised in every sphere of human activity: the Christian Socialists centred their attention on the productive societies, and erred in believing that their adoption would completely abolish all competition. But the English Socialists first advanced the fruitful idea, that if the workmen wish to gain their share in the growth of national opulence, they must not only await the higher wages which will ultimately attend the increased employment of capital, but must also take part in the profits of capital by putting their individual possessions into the common stock, and by helping to choose the "captains of industry." Trade-unions have done much and will no doubt accomplish far more in the gradual elevation of the working classes; but their sphere is circumscribed by the conditions of the problem. They are composed of workmen, and as workmen pure and simple the lot of the artisans cannot be materially altered. An effectual improvement can only be produced by some method which will ensure to the labourers a practical independence, which will lift them as a body out of their position as permanent subordinates, and which will make them feel that they are all equally responsible for the evil, equally benefited by the good that may result from their united efforts. This the system of industrial cooperation in its widest sense—whether it prove the ultimate solution of the problem or not-can achieve; this in spite of temporary failures and premature attempts it may in one form or another, some day

realize; and this, when accomplished, will ever be regarded as the outgrowth of an idea for which we must above all thank the English Socialists.

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CHAPTER THREE.

ON SOME NEGLECTED BRITISH ECONOMISTS.

[This originally appeared as two articles in The Economic Journal, vol. xiii, 1903]

It is a trite saying that the history of political economy is still to be written. The books that pass under that name contain only the barest outlines of the subject, and they are all especially weak and meagre in that particular division of the field which happens to be distinctly the most fruitful. The literature of economics in Great Britain, from the end of the sixteenth to the middle of the nineteenth century, so far transcends in importance that of other countries that the neglect of all but the great masters of the classical school is as remarkable as it is deplorable. For the period before Adam Smith, so rich that an economist of the period collected no less than fifteen hundred English books and pamphlets prior to 1760, we have only the fragmentary monograph by Roscher, the incomplete and prejudiced bibliography of McCullech, the short essays by Ashley, Hewins and Cossa, some allusions in Cunningham, and a few sporadic notices in dictionaries and encyclopædias. For the first half of the ninetcenth century there exist, indeed, somewhat fuller, but still quite inadequate, accounts of the great masters, like Ricardo, Malthus, and Senior. Practically the only attempts to include any of the other writers have been made by Foxwell in his masterly introduction to Menger's well-known sketch and by Cannan in his History of the Theories of Production and Distribution. Foxwell, however, does not pretend to give more than the barest outline of the subject, and Cannan has not only neglected several writers of at least equal importance with those that he has included, but has failed in some instances to give an entirely fair account of the authors of whom he treats.

It is the object of the present chapter to call attention to some of the British writers who undertook to discuss economic theory during the two decades that followed the appearance of Ricardo's *Principles*. It will perhaps surprise many to find in this literature so much that foreshadows the most recent contributions to economic doctrine. As an introduction to this discussion, we shall say a few words about some of the neglected writers at the close of the eighteenth and beginning of the nineteenth century.

1. The Earlier Writers.

In the generation that intervened between the Wealth of Nations and Ricardo's earliest tracts, the greater part of the economic literature consisted, as in the preceding period, of pamphlets dealing with current practical problems. In the last quarter of the eighteenth century, some interesting side-lights. it is true, are thrown on economic principles, especially in the discussion of such topics as the commercial relations with the United States, Ireland and France, the growth of population, the changes in agriculture, the East India trade, the increasing burdens of taxation and the public debt, the relief of the poor, and the rise of prices at the close of the century. The influence of Adam Smith, however, was so preponderant that well-nigh the only discussion of economic theory that has come down to us is associated with the names of Godwin, Malthus and Lauderdale. Yet there are not wanting other discussions of economic theory which have hitherto been overlooked. Of these, it may suffice to mention only two-the controversy over the Physiocratic system, and the treatment of the problem of taxation.

As to the Physiocrats, it is worthy of remark that Oncken, the most scholarly and independent student of the Physiocratic system, has recently made the assertion that the Physiocrats had no followers in England, —this, too, in the face of the discussion by Higgs of the works of William Spence. Yet Higgs also has overlooked two writers, both of them, indeed, anonymous, but each in some respects superior to Spence.

Of these, the first staunch follower of the Economistes is the author of a work published in 1797, entitled The Essential Principles of the Wealth of Nations illustrated, in Opposition to

¹ Oncken, Geschichte der Nationalokonomie, I. Die Zeit vor Adam Smith, 1903. p. 422,

² Higgs, The Physiocrats, 1897, p. 137.

some False Doctrines of Dr. Adam Smith and Others. In this volume of 144 pages, which displays some acquaintance with the earlier English economic literature, the author states and develops the principal doctrines contained in what he calls "the system of the Economists," or, as he sometimes terms them, "the political Economists." 1 He takes issue not only with Adam Smith, but more especially with Arthur Young,2 whose arguments he considers scarcely more solid than the "flimsy productions of the witty Voltaire." 3 In only one point does he balk at the conclusions of the Physiocrats, namely, that of considering the proprietors of land as a productive class. They may, indeed, be made an essential class in the community, says our author, but only the cultivators of the soil are really productive. The way in which the landowners may be made to become an essential class is by putting on them the burdens of the state. Through the adoption of the "single tribute" * on land rent, which is the "natural fund for the defence of the community," "the possessors of these rents instantly become not only an essential class in society, but an honourable class as well." 5

Since the prosperity of England depends, not upon its manufactures or its commerce, but upon the productiveness of its land—this new Potosi, "this mine of riches to which the Economists wish to direct the attention of British patriots," —it becomes the duty of the government to help in enhancing the productivity of the soil. "Not only the neglected lands but the neglected cultivators call for the interposition and protection of the Government." ⁷ Prosperity depends upon high rents, and rent is identified with the "net produce" of the Physiocrats.

"The rise of rents, which is a principal object of the Economists, enlarges the power of the main wheel that moves every other wheel in Society, and is itself set in motion by nature and the industry of man. As the motion of that wheel is progressive or retrograde, so, proportionally, is the prosperity of

^{*}The Essential Principles, etc., pp. 49, 54, 86. This is ascribed in Palgrave's Dictionary, i., 257, to Simon Gray. This must be an error, as Gray was an opponent and not, like the author of this work, an advocate, of the Physiocratic system.

³ Ibid., pp. 56-81.

³ Ibid., p. 55.

^{*} Ibid., pp. 91, 81, etc.

^{*} Ibid., p. 54.

^{*} Ibid., p. 115.

^{*} Ibid., p. 117.

the State progressive or retrograde." Not all high rents, however, betoken national prosperity. "The increase of produce and not the increase of the price of produce is what a wise agricultural nation will chiefly aim at." And with an enthusiastic statement of what may yet be expected in Great Britain from a complete adoption of the Physiocratic doctrines, the work closes.

The obvious trend of English enterprise, however, at the close of the century was away from the soil, and in the direction of commerce and industry. One last attempt was made to recall the British public to the true path of honour and riches. With this attempt the name of Spence is associated. In the controversy between Spence on the one hand, and James Mill and Cobbett on the other, an anonymous author took the part of the theorists who should attempt to remove the controversy from the battlefield of practical politics and relegate it to the quiet and serene field of principle. His work of 115 pages, published in 1809, bears the title, Sketches on Political Economy Illustrative of the Interests of Great Britain; intended as a Reply to Mr. Mill's Pamphlet Commerce Defended, with an Exposition of some of the Leading Tenets of the Economists.

The author starts out with a statement of the relation of value to utility, in which he seems to come close to some modern doctrines. In the opening chapter, he points out that "in attempting to establish the criterion of value the first circumstance which occurs is its strict correspondence with want." After speaking of the relation of desires and the means of satisfaction, he goes on to state that "the importance of any object is decreased as the want or desire thereof is diminished, and the value of commodities always corresponds with the proportion which they bear in quantity to our necessities." 3 It is true that in this particular passage he does not use the term utility; but later, in his chapter on consumption, he makes it clear that value depends on utility, and he tells us that "we can only deem those things valuable which have an aptitude for consumption, and in this sense it (value) is only another expression for utility." 4 So, again, he tells us that "value is inseparable from utility, and

¹ The Essential Principles, etc., p. 118. ² Ibid., p. 119.

^{*}Sketches, etc., p. 2. *Ibid., p. 74.

in proportion to its utility will it be estimated." Since want and desire, however, are always in proportion to each other, value arises from the difficulty of obtaining those objects which are calculated to supply want or remove desire. Value, therefore, may safely be defined as "labour or the exertion which is necessary to procure or create any desirable article." 2

In the course of the argument, the gradation of wants, the satisfaction of which lies at the basis of value, is utilised to prove the dependence of all prosperity upon agriculture, the source of satisfaction of the most urgent wants. Capital, it is conceded, is accumulated labour, but "capital has not the power of reproducing with increase, but can only reproduce itself equal to its original amount." For "it is the effect of a previous cause, and can never be the cause of producing that of which it is the effect." This leads him to the ordinary positions of the Physiocrats, which do not call for any special statement. It is, however, interesting to note that in the chapter on consumption he objects to the theory of Adam Smith on productive and unproductive labour, and declares, much in accord with the modern view, that "the distinction between commodities of a durable and perishable character is trifling and futile." On one point, however, he seems to misconceive the conclusions of the Economists, and erroneously states as one of their mistaken conclusions that "an equal division of the land should naturally result from the fact that all wealth is derived from the soil." 4 That our author is still writing under the influence of the domestic system, and that he has no real appreciation of the vast changes which were rapidly transforming the face of British society appears from his use of the term manufacturer.5 in its old significance of manual labourer.

With this book, the attempt to introduce and to popularise in England the doctrines of the Physiocrats came to an endif we neglect, as we may well do, the partial support lent to their theories two decades later by Chalmers. We thus come to the second discussion mentioned above 6—that of the effects of taxation.

¹ Sketches, etc., p. 75.

² Ibid., p. 3. ³ Ibid., p. 29.

⁴ Ibid., p. 7. ⁵ Ibid., p. 39.

⁶ P. 4.

In the field of public finance, easily the most remarkable work is the anonymous Enquiry into the Principles of Taxation. published in 1790.1 With the exception of Petty's essay in the seventeenth century, this is the first English work devoted entirely to taxation.2 The author sees clearly that the fundamental problem is that of the incidence and effects of taxation. He is the first to make the distinction between "Payers of Taxes" and "Bearers of Taxes," a distinction which slumbered more than a century before it was again introduced into English scientific nomenclature.3 Although he is well acquainted with the work of Adam Smith, whom he calls in one place a "very respectable" writer, and in another a "truly ingenious" thinker, he differs fundamentally, not only with Smith, but with Steuart, as well as with the Physiocrats. His analysis of incidence culminates in the statement that the final determinant is the state of demand in relation to supply; and that taxes will be shifted or not according to the conditions of prosperity in each particular class. Where society is advancing, that is where demand is continually increasing, the tax will be "thrown round in a circle" and will be prevented from falling anywhere.4 The real fund out of which taxes in progressive societies are ultimately paid consists of the profits resulting from new inventions, subdivisions of labour, and superior dexterity, skill and exertion.5

We can here do no more than barely allude to this interesting author. His importance lies not only in the fact that he developed the diffusion theory of taxation long before Canard in France, and with a far more rigorous analysis than Verri or his few English predecessors, but in that his doctrine constitutes an improvement on the diffusion theory itself. Incidentally he

[In the original essay the authorship of this book was ascribed as a probability to Andrew Hamilton. J. Findlay Shirras, The Science of Public Finance, 1924, p. 185, shows that this ascription is erroneous.]

An Enquiry into the Principles of Taxation chiefly applicable to Articles of Immediate Consumption. Printed for J. Debrett, 1790, 4°, 295 pp.

The author explains in the preface that "taxation as a subject of knowledge has never been duly cultivated." He declares the work to be "the first regular attempt which has been made to supply this important chasm in the science of government."

³The present writer was ignorant of this remarkable work when preparing the second edition of *The Shifting and Incidence of Taxation*. It was utilized in later editions.

An Enquiry, etc., p. 179.

⁶ Ibid., pp. 149-155.

discloses three mistakes of Adam Smith-first, the assumption that taxes on wages must always be shifted to profits; second, the failure to notice that, even when the conditions are favourable to a shifting of the tax on wages to profits, there is nothing in this process peculiar to wages; and third, the statement of what is now known as the excess-of-price-above-tax doctrine—the doctrine, namely, that when the tax is assessed on the original producer, the price of the article after each exchange will advance by more than the amount of the tax. On the contrary, says our author as a result of his analysis, "when improvements in a State are numerous, when the invention of machines, the subdivision of labour, and greater exertion and skill are taking place in every department, a tax will be lightened, the more hands it goes through. It will be absorbed, as it were, by every improvement, and be lightened or annihilated, according to the degree and number of improvements which it meets with; i.e. instead of becoming heavier, taxes will become lighter in proportion to the number of hands through which they pass, in a thriving society." 2 He concludes that "all speculations, whose object is to show on what fixed fund or class taxes must fall, are vain and unsatisfactory, and will be generally disproved (as they almost always have been) by experience." 3 It was the failure of Ricardo to notice, and to profit by, this advice which is responsible for much empty discussion by the classical English economists.

2. The Contemporaries of Ricardo.

We come now to several contemporaries of Ricardo, to whom, indeed, we find a few references in economic literature, but whose real importance has not been adequately recognised. Chief among these authors are Torrens and Craig.

Colonel Robert Torrens is treated somewhat cavalierly in Palgrave's *Dictionary*. Not only is the discussion of his writings limited to five lines, but his productions are declared to be "as a rule, devoid of permanent merit." Yet Ricardo himself entertained a different opinion of Torrens in several matters, and Cannan speaks respectfully of Torrens in the few points dis-

¹ An Inquiry, etc., p. 178.

^{*}Ibid., p. 159.

^{*} Ibid., p. 183.

cussed by him, even though, as we shall see, he also fails to give Torrens his due place.

There is, indeed, much in Torrens's voluminous writings that is "devoid of permanent merit," and it is incontestable that he is often magniloquent.1 A careful reading of his productions, however, seems to justify us in making the following claims for Torrens: -

In the first place, he discovered, independently of Malthus and Ricardo, the law of rent.

Secondly, he advanced a theory of wages which was adopted by Ricardo.

Thirdly, he discovered the law of comparative cost, the credit

of which is usually ascribed to Ricardo.

Fourthly, he advanced a theory of profits which differed from that of Ricardo, and which is considerably nearer the truth.

With reference to the first point, it is now well known that Ricardo was not the originator of the theory of rent. Not to speak of Anderson in the eighteenth century, the whole theory was implicit, and even to a certain degree explicitly recognised, in the Lords' Committee of 1813. The essays of Malthus and West appeared in 1815. The Essay² of Torrens was published at the beginning of the same year-although it was written in 1814, at a time when the author could not have been acquainted with the works of Malthus and Ricardo.3 Thus even if the essay of Torrens was not published before those of West and Malthus -although in all probability it did antedate them-Torrens must be credited with at least a simultaneous and independent discovery of the law of rent. For he tells us how the "natural rent of the land proprietor" is always a "net surplus," 4 and explains later how it appears from the testimony in the Lords' Committee that cultivation proceeds from the better lands to inferior lands. the difference in the produce of "soils of first rate" and of "second rate or third rate quality" "appearing in the form of rent." 5 Tor-

¹ Cannan, A History of the Theorics of Production and Distribution, p. 123.

² An Essay on the External Corn Trade. By Robert Torrens, 1815. The preface is dated Feb. 17, 1815.

This is so stated in the preface to the later editions. Cf. p. ix of the preface to the 4th edition, 1827.

⁴An Essay, etc., first ed., 1815, p. 60. ⁵Ibid., pp. 212, 256, 325.

rens is accordingly a strong advocate of free trade in corn, for any restriction on importation "forces into cultivation land of inferior quality, and . . . by increasing the natural price of corn, lowers, universally, the productive powers of labour and capital." In a later edition he reiterates some of these views, but thinks that he has made an important emendation of the Ricardian theory, by calling attention to the difference of situation rather than of fertility as an explanation of rent 2—being here a forcrunner of Von Thünen and many later critics.

As to the second point, the proclamation of a theory of wages which was adopted by Ricardo, it will also be seen that Torrens has not received his deserts. Torrens first put forward the theory of the natural rate of wages as influenced by the standard of life. and it is this theory that soon became the stock-in-trade of the classical school. Cannan, it is true, emphasises this,3 but he exaggerates one alleged point of difference which he thinks he discovers between Torrens and Ricardo, and fails to accentuate the real points of difference. It is claimed by Cannan that by "natural wages" Torrens means the average rate, and Ricardo the minimum rate.4 Yet when Torrens in a later edition of his work reprints almost word for word the theory first propounded by him, he explains that "the minimum below which the real wages of labour cannot permanently fall consists of that quantity of the necessaries of life which climate and custom render necessary to support the labourer while at work, to enable him to bring up a family sufficient to preserve the supply of labour even with the demand." 5 Morcover, as regards the alleged distinction between the Ricardian phrase of "perpetuating the race without either increase or diminution" and Torrens's phrase of "preserving in the market an undiminished supply of labour," Cannan himself confesses that when Ricardo applies the theory of wages to taxation, he uses the phrase "to keep up the race of labourers" in the sense of Torrens rather

¹An Essay, etc., pp. 73,74. Cannan quotes this passage on p. 167 of his work, but does not call attention to the emendation in the later edition, referred to in the next note.

² Ibid., 4th edition, 1827, pp. 138, 144 et seq.

² Cannan, op. cit., pp. 243-248.

⁴ Ibid., p. 247.

⁵ Torrens, op. cit., 4th edition, p. 84.

than in his own sense.¹ As a matter of fact, nothing but an over-refinement of interpretation can discover any difference between the theory of Ricardo and that of Torrens. Ricardo himself never thought that he was advancing any new doctrine, for he tells us that "the whole of this subject is most ably illustrated by Colonel Torrens."

But while Torrens originated the theory of wages usually ascribed to Ricardo, he did not draw by any means the same conclusions—and it is precisely these conclusions which served later to cast discredit on the political economy of the day. Torrens, for instance, in a subsequent work entitled An Essay on the Production of Wealth, strenuously objects to the theory of Ricardo that the introduction of machinery may occasion a permanent diminution in the demand for labour. He declares this doctrine to be "altogether incorrect." ²

In a still later work devoted entirely to the wages question, where he deals fully with the problem, he claims that Ricardo's conclusions rest upon a "hypothetical case," which "never occurs in practice." On the contrary, Torrens tells us, in advancing the modern doctrine, that "all inventions for abridging labour and diminishing the cost of production have the effect of increasing both maximum and actual wages." Torrens, however, does not in the least deny the hardships suffered by those who are for the time being thrown out of employment. It is interesting to find him advocate for the first time the idea of a national insurance fund to be applied to the alleviation of such misery:

It also appears that the general good which results from the employment of new and improved machinery is accompanied by partial evil. While the public acquires additional wealth, the individuals who are supplanted in their accustomed occupations are reduced to poverty. Humanity and justice require that those who thus suffer for the public good should be relieved at the public expense. Whenever a new application of mechanical power throws a particular class of operatives out of employment, a national fund should be provided to aid them in betaking themselves to other occupations. It is a disgrace to the Legisla-

¹ Cannan, op. cit., p. 257.

² An Essay on the Production of Wealth, 1821, p. ix.

On Wages and Combinations, 1834, p. 41.

^{*}Ibid., p. 44.

ture and to the country, that the numerous body of hand-loom weavers should have been left so long in misery and destitution, and toiling to the death in hopeless competition with the power loom. A comprehensive plan for their relief should be one of the earliest measures of the reformed Parliament.²

Even in his earliest works, Torrens was aware of the consequences of the industrial revolution. Whereas all his predecessors had used the term manufacturer in accordance with its derivation in the sense of the manual workman, Torrens distinguishes in 1815 between the "master manufacturers" and the "labouring manufacturers." It was not long before the predominance of the factory system had completed the transition by popularising the term "manufacturer" in its modern sense.

Torrens displays his independence of the classical school in other phases of the labour question. He maintains that combinations of labour might have the effect of increasing the rate of wages. In nations which have some advantage in producing commodities for abroad, this possibility becomes a probability.³ But after all, thinks Torrens, the limit to which wages may be raised, or even the possibility of raising wages at all, depends on the application of another principle, which he was the first to emphasize, and which we shall now proceed to discuss as the third discovery of Torrens—the principle, namely, of comparative cost.

The doctrine of comparative cost has almost universally been regarded as one of the great achievements of Ricardo. Yet not only the principle itself, but many of its applications, are found in Torrens. Torrens is discussing the influence of a free external trade in corn upon the progress of agriculture. Most people, says he, think that if corn could be grown as cheaply in England as in Poland it would be raised at home:

But this conclusion, however obvious and natural it may at first sight appear, might, on a closer examination, be found entirely erroneous. If England should have acquired such a degree of skill in manufactures, that, with any given portion of her capital, she should pre-

¹ On Wages and Combinations, 1834, p. 44. ³ An Essay on the External Corn Trade, p. 235.

³ "In countries possessing superiority in manufacturing for the foreign market, wages may be raised within the limits of such superiority."—On Wages and Combinations, p. 73.

pare a quantity of cloth, for which the Polish cultivator would give a greater quantity of corn, than she could, with the same portion of capital, raise from her own soil, then tracts of her territory, though they should be equal, nay, even though they should be superior, to the lands in Poland, will be neglected; and a part of her supply of corn will be imported from that country. For, though the capital employed in cultivating at home might bring an excess of profit over the capital employed in cultivating abroad, yet, under the supposition, the capital which should be employed in manufacturing would obtain a still greater excess of profit; and this greater excess of profit would determine the direction of our industry.¹

At a somewhat later date Torrens repeats the principle in the following words 2:—

In the earlier edition of the Essay on the Corn Trade, it was shown, the Author believes for the first time, that a permanently high scale of general prices, from whatever cause arising, cannot depress domestic industry by encouraging the importation of cheaper foreign articles; and that commodities, the cost of producing which is greater in foreign countries than at home, may, nevertheless, be imported, provided the comparative disadvantage of the foreign capitalist in producing the imported article, be less than the comparative advantage of the domestic capitalist in producing the articles imported in exchange.

Torrens goes on to say that "these principles Mr. Ricardo adopted into his very valuable work upon *Political Economy and Taxation*; and they form, in some measure, the ground-work of his chapters upon foreign trade, and of his doctrines on the influence of taxation upon the export and import of commodities."

Torrens applies this doctrine of comparative cost,³ not only to the market for commodities, but also to the labour market. Although no enemy of the trades unions, Torrens thinks that the scheme of the eight-hour day in England is at the moment impracticable. He refers to it as the plan propounded by "Mr. Fielden in conjunction with the benevolent monomaniac, Robert Owen." ⁴ Torrens points out that shorter hours, or what is its equivalent, higher wages, can indeed be secured in a country,

¹ An Essay on the Corn Trade, 1815, pp. 264-265. Cf. pp. 48, 222-227.

^{*} Ibid., 4th edition, p. vii.

³ [In a contribution to the *Economic Journal*, vol. xxi (1911), 448, Professor J. H. Hollander contends that this honour is mistakenly ascribed to Torrens. A rejoinder to this contention by the present writer will be found in the subsequent pages of the same volume of the *Journal*.

On Wages and Combinations, p. 90.

but only to the extent that a country possesses peculiar advantages over its competitors in the fabrication of goods for the foreign market; and these advantages may be the result of a natural or of an acquired superiority. But the superiority which England possesses in the greater skill of the workman, in better machinery, and in cheaper fuel, is outweighed by the comparative dearness of food. "No plan for improving the condition of the people can by possibility be effectual, unless it increases the quantity of work which can be executed in a day or year, or the comparative cheapness of machinery, fuel, or carriage, or diminishes the comparative dearness of food." Hence the first step toward improvement must be the abolition of the corn laws.

The fourth point made by Torrens to which we desire to direct attention is of importance as a criticism rather than as a piece of constructive work. Torrens objects strenuously to Ricardo's doctrine that profits must vary inversely as wages.² He terms this "a hasty and premature generalisation," and thinks that Ricardo has over-emphasised the influence of one out of many causes. Profits, according to Torrens, are not a part of the cost of production. Profit is a surplus, not a cost. "The profits of stock never make any part of the expense of production; they are on the contrary, a new creation brought into existence in consequence of this expense." And again, "The profit of stock so far from forming any part of the cost of production is a surplus remaining after this cost has been completely replaced." Hence, while profits constitute a part of the market price of commodities, they do not form part of the natural price.

Torrens seems here to be on the high road to the modern theory. But his own treatment is not entirely satisfactory; for he is unable to analyse successfully the true relation between normal and market price, and tells us, notwithstanding his former statements, that "things equal in natural price will also upon the average, be equal in market price." 5 Whatever we may think of this point, to which attention has been called by others,6

¹On Wages and Combinations, p. 99.

An Essay on the Corn Trade, 4th edition, p. xi.

^{*}An Essay on the Production of Wealth, p. 51.

⁴ Ibid., p. 54.

^{*} Ibid., p. 55.

^eCannan, op. cit., p. 208.

Torrens shows himself in one respect broader than Ricardo. The rate of profits, according to Torrens, depends, not only on the rate of wages, as Ricardo thought, but to a much more important extent upon the quality of the soil under cultivation, and above all upon the degree of skill with which labour is applied. The resort to inferior soils, which increases cost, tends to diminish the rate of profits in manufactures as well as in agriculture; but the same increase of population which compels resort to inferior soils leads to a more accurate division of employment and to the use of improved machinery, and these lead to an increase in the rate of profit. This last point—"the greater degree of skill and economy in the application of labour"-may completely counteract the effects, not only of the resort to inferior soils, but also of the changes in money wages. High or low profits, therefore, do not necessarily depend, as Ricardo thought, on low or high wages.

We do not stop to dwell on the other contributions which Torrens made to contemporary discussion. Like most of the economists of the day, he had a greatly exaggerated notion of the achievements of the science.2 But in both constructive and critical powers, Torrens has been much underrated. The future historian of economic theory will have to credit him with the honour of originating several important doctrines which are usually ascribed to his more famous contemporaries.

The other contemporary of Ricardo referred to above 3 is John Craig, to whom Palgrave's Dictionary devotes just one sentence. Craig was the author of two books—a three-volume work on the Elements of Political Science, published in 1814, and a shorter volume of Remarks on Political Economy, which appeared in 1821. His *Elements* covers, as the title indicates, a broader field than that of economics, but contains for the economist only two noteworthy points. One is Craig's exposition of the futility of Adam Smith's distinction between productive and unproductive labour.4 In this, however, Craig had been preceded by Lauder-

¹ An Essay on the Corn Trade, 4th edition, pp. 117 et seq.

² "With respect to Political Economy, the period of controversy is passing away, that of unanimity is rapidly approaching. Twenty years hence there will scarcely exist a doubt respecting any of its fundamental principles."-An Essay on Production, 1821, xiii.

P. 341.

⁴ Vol. ii., pp. 93 et seq.

dale,¹ whose criticism of this "extraordinary distinction" is well known. The other point is the attention devoted by Craig to the problems of public finance, and more especially to the question of capitalisation of taxation. As this matter has already been touched upon elsewhere,² we shall confine our attention to the later work ³ of Craig devoted specifically to questions of political economy.

Craig starts out with a rather interesting discussion of value. He considers the view of Lauderdale that value in exchange or individual riches should be carefully distinguished from value in use or national wealth. Lauderdale had called attention to the obvious fact that by increasing the quantity of the most useful articles we often diminish its aggregate value in exchange; and like Adam Smith he considered value in use and value in exchange opposed to each other. Craig, on the other hand, finds that utility is the basis of all value. It is undeniable, says he,4 that relative values of commodities may change, and that "those persons who happen to be possessed of articles which are produced in larger quantities than formerly . . . may find themselves poorer, while the chief uses of the article remain unimpaired." But it would be a mistake, thinks Craig, to conclude that value in use is here opposed to value in exchange. For "in such cases, there are others of its uses which cease to exist. Its possession is no longer a mark of distinction, nor can the additional quantity that has been produced yield to those by whom it must be consumed, gratification equivalent to its former price." If coats fall one half in price, the "exchangeable value" of two coats is now equal to what formerly was the value of one; but neither would their value in use have experienced any perceptible increase.5 "All of the broadcloth that, in the estimation of purchasers, was worth the former price, had been

¹ Lauderdale, An Inquiry into the Nature and Origin of Public Wealth and into the Means and Causes of its Increase, 1804, pp. 151 et seq.

² In the writer's work on *The Shifting and Incidence of Taxation*, 4th edition, 1921, pp. 138-142. It is here stated that Craig was the only early English writer "to devote a separate volume to questions of public finance." But see above, p. 69.

²The full title is: Remarks on some Fundamental Doctrines in Political Economy illustrated by a Brief Inquiry into the Economical State of Britain since the year 1815. Edinburgh, 1821.

^{*}Remarks, etc., p. 10.

⁵ Ibid., p. 11.

formerly brought to market, and if more is now to be disposed of, it must be to those who did not reckon its utility equivalent to its former cost. New purchasers indeed will appear in proportion to the reduction of price; because at every step of the decline it is brought down to the estimate which an additional number of persons had formed of its power of producing gratification, or, in other words, to their estimate of its value in use."

This passage is notable because Craig is on the continual verge of expressing the idea of marginal utility. He sees not only that value depends on utility, but that with every decrease in value or price there is a new (marginal) group of purchasers whose lower estimate of utility is now available for disposing of the increased supply. This is practically the basis of the modern doctrine of value.

Craig then proceeds to point out that if the value in exchange of some commodities is decreased by additional supply, the value of other commodities will be increased. For "those who formerly bought the article that is produced in excess, now getting what they want of it at a lower price, will have part of their revenue to expend in some other way; and the new demand thence arising for some other articles will raise their exchangeable value in proportion as that of the other is depressed." It is erroneous to assume, therefore, that increased supply of commodities means a decrease in general values.

Combining these two points, and considering that "by the cheapness of a particular commodity, some of its uses are generally diminished; that by the fall of its price, the demand for some other articles, and consequently their prices, are advanced," Craig concludes that "value in use whether viewed in reference to any single commodity, or to the aggregate possession of a nation, must be very accurately measured by value in exchange." This is not a happy statement. It manifestly confuses total and marginal utility; and, as it stands, seems to be erroneous. But if read in context with the whole explanation it will be seen that Craig is really getting nearer to the truth than are most of his predecessors and contemporaries. In another passage he puts the statement in a less exceptionable

form. Speaking of Say's opinion that value in exchange is "the only kind of value to which the science of Political Economy has reference" Craig says, "To this I agree, but only because it is the *exponent* of value in use." ¹

Craig never accepted the fundamental tenets of the Ricardian economics. He is a strong opponent of the labour doctrine of value, which he declares to be "an ingenious, but unsound theory." In other points, also, Craig takes issue with the dominant school. He does not believe that wages are fixed by the standard of life,2 nor does he agree with the theory that a tax on wages necessarily raises wages.3 He is equally opposed to the doctrine that wages and profits must vary inversely to each other. After an analysis of the nature of capital and the relation of profits to wages, he concludes: "It is rather a startling circumstance attending this theory, that what it represents as the necessary effect produced by high wages upon profits in all branches of industry, is directly contrary to the experience in each particular trade. Though it would be going too far to assert that high wages and high profits are always co-existent: yet this proposition would be nearer the truth than that which has been announced by Mr. Ricardo." 4

Finally, Craig characterises the Ricardian theory of rent as one "which, in so far as it is just, is equally a truism with that opinion which ascribes it to monopoly." ⁵ He takes exception, moreover, to the historical or dynamic part of the Ricardian theory. But above all, he calls attention to the analogy between returns from the land and from capital, or as he calls them, "rent and the profits of fixed capital." "So much do these sources of revenue resemble each other, that even in ordinary language the return for fixed capital, when the necessary circulating capital is supplied by a different person, is always denominated its rent." ⁶ Notwithstanding this analogy, however, Craig confesses that in some respects, land must be differentiated from fixed capital. He advances four reasons, of which, perhaps, the chief is the fact that "whereas machinery is gradually deteriorated by use, land is gradually improved." ⁷

¹ Remarks, etc., p. 14, note. ² Ibid., p. 64. ³ Ibid., p. 67. ⁴ Ibid., p. 138. ⁷ Ibid., p. 142.

⁴ Ibid., p. 90.

It is easy from our modern point of view to call attention to the obvious weakness in Craig's exposition, due to his failure to distinguish between interest and profits, although he does make an attempt to do so in another place.¹ But it must not be forgotten that in this respect he did not differ materially from the other writers of the day. It was quite sufficient for one man to have made the valuable suggestions which we find in his work. Craig is the first English economist to emphasize the connection between value and utility, to disclose the fallacy of the supposedly necessary opposition between profits and wages, and to dwell on the analogy between the revenue from land and from capital. All these points, although completely overlooked at the time, have been incorporated into the body of modern economic doctrine. Craig, no less than Torrens, deserves more attention than he has received.

3. The Value Theorists.

The appearance of Malthus's Principles of Political Economy in 1820 seems to have given rise to an active discussion on some of the fundamental topics in dispute between Ricardo, Say and Malthus. For the next few years we have a number of pamphlets and essays devoted to a consideration of special points of theory. Some of these are of such minor importance as to deserve only a passing reference. Of this nature, are two works published in 1821, one entitled Observations on certain Verbal Disputes on Political Economy, particularly relating to Value and to Demand and Supply, which seeks to show some inconsistencies in Ricardo, Malthus and Say; and the other: An Inquiry into those Principles respecting the Nature of Demand and the Neccssity of Consumption, lately advocated by Mr. Malthus, from which it is concluded that Taxation and the Maintenance of unproductive Consumers can be conducive to the Progress of Wealth. Of somewhat more than ordinary interest is a work which appeared in the following year (1822), designed to enforce the same doctrine as that contained in the last pamphlet, the doctrine, namely, that gluts are possible and can be averted only by an increase of luxurious or unproductive consumption. The title of this is:

¹ Remarks, etc., p. 75, note.

Considerations on the Accumulation of Capital and its Effects on Profits and on exchangeable Value.

A few works of the same period have attractive titles but are somewhat disappointing in contents. The anonymous work of 1821, of almost three hundred pages, entitled An Essay on the Political Economy of Nations, or a View of the Intercourse of Countries as influencing their Wealth, is a not over acute book devoted primarily to problems of internal trade. The almost equally voluminous work by Thomas Smith, An Attempt to define some of the First Principles of Political Economy, published in the same year, is not what it seems to be. The author tells us, indeed, that "for several years past he has been endeavouring to draw the public attention towards an explanation of the mode of ascertaining value, and of the measures of it, very opposite to what has been assumed by Ricardo." A large part of the work is, in fact, devoted to a discussion of the relation between bank notes and prices—a discussion into which we shall not enter here.

Most of the essays of the time, however, were concerned with the discussion of the nature and measure of value, and of these the majority based themselves on the theory advocated by Ricardo and McCulloch. The ball was set rolling in 1822 by the author of An Essay on Political Economy, who signs himself in the preface, E. R., and who takes exception to the Ricardian labour theory of value. "Commodities are not sold because they are produced, but because they are demanded. Neither does their exchangeable value arise from the cost of producing them, but from the demand for them when produced . . . The quantity of labour only affects the value as it affects the supply." ²

The author proceeds with his argument to show that high wages do not necessarily mean low profits, but may mean high prices; and he then applies this doctrine to the subject of taxation. It is worthy of note that he here gives a mathematical treatment of the incidence of taxation on land—with one excep-

¹The full title is: An Essay on some General Principles of Political Economy, on Taxes upon Raw Produce, and on Commutation of Tithes. [By E. R.] London, 1822, 72 pp. The author states in his preface that this work was written before he had seen Malthus's Principles of Political Economy.

³ An Essay, etc., p. 8.

tion the earliest attempt made in England to apply mathematics to economics.¹

A more acute critic of Ricardo was Samuel Bailey, whose anonymous Critical Dissertation on Value ² exerted considerable influence at the time. This was written as a reply to the familiar Templars' Dialogues on Political Economy, which appeared in the London Magazine for April, 1824, and in which the author, De Quincey, accepted and amplified the Ricardian theory. Bailey does not mince matters. He speaks of the "confusion and obscurity which mark the works of some of the most celebrated writers," and in particular he accuses Ricardo of "elliptical and disjointed reasoning," of "perplexity and confusion," of lack of "analytical subtility," and of "little consciousness of the nature of the operations in which he excelled, and little familiarity with the analysis of terms." **

Since value is essentially relative in nature, Bailey objects to Ricardo's attempt to discover a commodity of invariable value.⁵ To Bailey, Ricardo's "contradiction involved in affirming the stationary or invariable value of an object amidst the variations of other things, is as direct and palpable" as to constitute a

¹ An Essay, etc., pp. 54-66. This earlier attempt was the one contained in An Essay on the Theory of Money, London, 1771 (by Major-General Henry Lloyd) referred to by Jevons, Political Economy, 2nd edition, xlv-xlvi. The mathematics used in the work of 1771 is of extreme simplicity when compared to that of the essay of 1822, which has escaped the attention of both Jevons and Irving Fisher in their respective bibliographies. A more elaborate effort to apply mathematics to economics, which has also eluded the attention of all writers on the subject, is the interesting work by the American, Samuel Gale, entitled An Essay on the Nature and Principles of Public Credit. The original work, a substantial volume of two hundred and thirty-four pages, was published anonymously in London in 1784, although the preface dated at Charles-Town, South Carolina, in 1782, was signed by Gale. A second part, entitled Essay II. on the Nature and Principles of Public Credit, appeared in the same year (1784) with a preface dated St. Augustine, East Florida, 1783, and a third part, with a long title of about ten lines, appeared in 1786, not published, but "printed, to save the labour of copying the manuscript." The books by Gale are by all means the most comprehensive and detailed examples of early mathematico-economic literature, and will repay careful examination. Cf. infra. p. 128.

The full title is: A Critical Dissertation on the Nature, Measures, and Causes of Value, chiefly in reference to the Writings of Mr. Ricardo and his followers. By the Author of Essays on the Formation and Publication of Opinions, etc., etc., London, 1825. Bailey is not mentioned by Cannan, much less by Cossa; but a reference to him is found in Palgrave's Dictionary.

^{*}A Critical Dissertation, p. vii. *Ibid., p. 10.

^{*} Ibid., pp. xvi, xviii, xx.

"strange and manifest error." 1 Malthus also is not free from the same mistake. Furthermore, Bailey characterises the alleged distinction between real and nominal value as "arbitrary and incapable of being turned to any use." 2 Above all, he objects to the labour theory of the cause and measure of value. Value according to Bailey, although often spoken of as a quality of external objects, really implies a feeling or state of mind.3 This state of mind is a result of many circumstances, among which, indeed, cost of production is to be included as an important, though not the sole, factor. But even if we confine our attention to that class of commodities which are susceptible of increase and subject to the law of competition where the influence of cost of production is so great, it is not true that cost of production is resolvable into mere labour expended. In the first place, it overlooks the cooperation of capital, which cannot be explained away by calling capital "accumulated or hoarded labour."

This is at best an awkward expression and can answer no good purpose. When we accumulate we add one thing to another, and it is essential to the process, that both should remain in existence. But labour, consisting in the mere exertion of muscular power, or in the equally evanescent notions of the brain, continually perishes in detail, and therefore admits of no accumulation.

Furthermore, apart from this, labour cannot be considered as uniform. Bailey asks:

What should we think of an assertion that coats are to each other in value as the quantities of cloth contained in them, or that their comparative value depends exclusively on the quantities of cloth required to make them.⁵

Above all, the exclusive stress laid upon labour neglects entirely the function of time in economic life. Bailey tells us in almost the same language as Böhm-Bawerk: "We generally prefer a present pleasure or enjoyment to a distant one, not superior to it in other respects." He then enters into a consideration of the importance of time in its effects on capital. Time,

¹ A Critical Dissertation, p. 16; cf. p. 30.

² Ibid., p. 38.

[•] Ibid., p. 180.

⁴ Ibid., p. 220.

⁶ Ibid., p. 221.

^{*}Ibid., p. 218.

like labour, is a consideration which may influence both buyers and sellers, and time cannot be resolved into labour.¹

So that even in the case of continuous production under competitive conditions, value is not resolvable into labour. But there still remain two other great classes of commodities, those subject in part or in whole to the law of monopoly, and those subject to the law of diminishing returns.² This leads Bailey to a consideration of the law of rent, in the course of which he asserts the analogy between land rents and labour rents: ³

The extraordinary profit out of which rent arises is analogous to the extraordinary remuneration which an artisan of more than common dexterity obtains beyond the wages given to the workman of ordinary skill. In the one case the monopoly is bounded by the existence of inferior soils, in the other of inferior degrees of dexterity.

Here we have the first attempt to generalise the doctrine of rent, an attempt which has usually been associated in English, at all events, with Senior. Over a quarter of a century before Mangoldt and Schäffle, we thus find in Bailey this broadening of the rent concept. Furthermore, Bailey objects to the statement that "rent does not enter into price" as at the best vague and indefinite, and as "one that ought to be banished from the science." 4

Finally, it must be noticed that Bailey is the first to put his finger on the real fallacy of the doctrine that wages and profits must vary inversely to each other. This error consists in neglecting the fact that "the value of labour does not entirely depend on the proportion of the whole produce which is given to the labourers in exchange for their labour, but also on the productiveness of labour." ⁵ "The proposition, that when labour rises profits must fall, is true only when its rise is not owing to an increase in its productive powers." ⁶ . . . "If the productive power of labour be augmented, that is, if the same labour produce more commodities in the same time, labour may rise in value without a fall, nay, even with a rise of profits." ⁷

¹ A Critical Dissertation, p. 219. ⁵ Ibid., p. 63. ² Ibid., p. 185. ⁶ Ibid., p. 64.

This, it will be seen, virtually contains the whole of the modern theory of the economy of high wages.

It will be recognised from this short account how keen and iertile a thinker we have in Bailey. The opposition to the labour theory of value, the emphasis put on time as an element in value, the broadening of the rent concept, the criticism of the statement that rent does not enter into price, and the importance assigned to productivity in affecting value—all these constitute loctrines of importance in the recent phases of the science. That they should have been enunciated in 1825 and then seemingly forgotten is eloquent testimony to the power which is sometimes exerted by a few great names in silencing for a time all criticisms, however sound they may be.

The discussion of value was continued in a number of other vorks. A criticism of Bailey appeared in the Westminster Review, and was answered by him in 1826 in a pamphlet entitled A Letter to a Political Economist. This, however, does not add anything material to his former exposition. A few years later, the views of Bailey were in part repeated and developed by Cotterill in his Examination of the Doctrines of Value. 1 Cotterill nakes short work of the labour theory of value, which he deems to have been completely refuted by the author of the Critical Dissertation, of whose name he seems to be ignorant. He, revertheless, proceeds to repeat the arguments, "as there are some Ricardians still remaining." 2 De Quincey's dialogues he considers "an ingenious logical legerdemain." 3 Like Bailey, he opposes to the labour theory the cost-of-production theory of value. He proceeds, however, to criticise Bailey on one point, and in this criticism he marks a retrogression. Bailey thought that the cause of changes of value "may be correctly stated to arise principally from the cost of production and that cost of production may be either labour or capital, or both." 4 Cotterill contends that this definition of cost is defective, because it does

¹The full title of this work is An Examination of the Doctrines of Value 28 set forth by Adam Smith, Ricardo, M'Culloch, Mill, the author of "A Tritical Dissertation," etc., Torrens, Malthus, Say, etc., being a Reply to those Distinguished Authors. By Charles Foster Cotterill, London, 1831. 128 pp.

An Examination, p. 8.

^{*} Ibid., p. 38.

⁴ A Critical Dissertation, p. 205.

not include profit.¹ It is the failure of Cotterill, shared by almost all his contemporaries, to distinguish between interest and profits, which is responsible for this confusion of thought. So in criticising the contention of Torrens that profits constitute a surplus, not a cost, Cotterill says triumphantly: "If the profits of stock do not form a component part of cost, the wages of labour cannot, as the former is to the capitalist what the latter is to the labourer. The labourer gives his muscular strength and time, and receives reward under the term wages. The capitalist finds the implements of husbandry, the machines of manufactures, advances the wages of labour, and receives his reward under the term profit."²

One other point of interest may be mentioned. Senior's well-known attempt to broaden the rent concept is generally ascribed to the appearance of his *Political Economy* in 1836. It is found in part, however, in his earlier lectures at Oxford. A passage from such a lecture, that "much of what properly belongs to profit and rent is generally included under wages," was quoted by Whately in his *Logic*, and led Cotterill to attempt to analyse the rent element in wages. The variety in the genius of different men, thinks Cotterill, is much the same as varieties in the quality of land. The development of the idea, although not very successful, is suggestive, and when we remember the early date of the performance, significant. As we have just seen, however, Senior as well as Cotterill was preceded in this point by Bailey.

In the same year as the work of Cotterill there was published a pamphlet of a very different type, and by a far more original thinker. All the discussions of value during the twenties had revolved around Ricardo, and none of the English writers could see their way to accept the doctrines of Craig and Say as to the dependence of value on utility. This was due chiefly to the failure to analyse clearly and successfully the notion of utility itself. Such an analysis, however, was undertaken in 1834 by W. F. Lloyd, who subscribes himself a student of Christ Church, and Professor of Political Economy at Oxford. The doctrine of final or marginal utility was at one time supposed to be the simultaneous discovery of Jevons in England, Menger in Austria,

¹ An Examination, p. 41, ² Ibid., pp. 55-62.

² Ibid., p. 46.

and Walras in Switzerland, in the opening years of the seventies. Later researches disclosed the fact that the same theory had been developed by Gossen in Germany in the fifties, and even before him by Dupuit in France in the forties. It will come as a surprise to many to be informed that the theory of marginal utility is, after all, an English discovery, and that what is a virtually identical doctrine was advanced by Professor Lloyd in 1834, a decade before Dupuit, two decades before Gossen, and considerably more than a generation before its rediscovery by Jevons, Menger, and Walras.

The title of this remarkable work is A Lecture on the Notion of Value as distinguishable not only from Utility, but also from Value in Exchange. Delivered before the University of Oxford in Michaelmas Term, 1833. According to the terms of the professorship held by Lloyd it was required that one lecture at least in each course be published annually. Both before and after 1833 Lloyd published other lectures, such as Two Lectures on the Checks to Population, delivered in 1832, and Four Lectures on Poor Laws delivered in 1834, each set appearing in the following year. Much as we might be tempted to dwell upon these also. we must content ourselves here with the lecture on value.1

The course of 1833 began with a talk on utility in general. and Adam Smith's conception of utility in particular. This lecture is, unfortunately, not preserved, with the exception of a small extract devoted to the latter subject, and published as an appendix to the lecture on value.2 The work with which we are dealing starts with a reference to this earlier lecture, and repeats

- ¹ In view of the rarity of Lloyd's economic writings, it may be of interest to give a complete list of his published Oxford lectures. They are as follows :--
- 1. Two lectures on the Checks to Population, delivered before the University of Oxford in Michaelmas Term, 1832. Oxford, 1833.

 2. A lecture on the Notion of Value, &c. Full title given above, p. 25.

 3. Four lectures on Poor Laws, delivered before the University of Oxford
- in Michaelmas Term, 1834. Oxford, 1835.
- 4. Two lectures on Poor Laws, delivered before the University of Oxford in Hilary Term, 1836. Oxford, 1837.
- 5. Two lectures on the Justice of Poor Laws, and one lecture on Rent, delivered in the University of Oxford in Michaelmas Term, 1836. Oxford,
- 6. Lectures on Population, Value, Poor Laws, and Rent, delivered in the University of Oxford during the years 1832, 1833, 1834, 1835, and 1836. London, 1837.
 - ²A Lecture on the Notion of Value, pp. 38-40.

the conclusion that Adam Smith evidently used the term value "in the sense of the real importance of an object to the person possessing it, and that he made this importance to depend on the difficulty of attainment." Lloyd now proceeds to a further examination of this view.

He considers first the possibility of a general glut of commodities. Without deciding this, Lloyd maintains that if we look at the matter from the point of view of the consumers rather than that of the producers, a general glut is impossible, because this is "the same thing as a general superabundance of wealth, and would indicate the full satisfaction of human wants." There is, however, "in fact, no assignable limit to the desires of mankind, for where one inconvenience is removed, others present themselves, which before had never been thought of; and thus the passion for wealth expands with the gratification of existing wants, and, if not absolutely infinite, may, at least, be termed indefinite."

This statement, however, would not be true "if the objects which can gratify human wants were limited in the number of their kind." "It is only the multiplication of the kinds of wants which renders the passion for wealth unlimited." Savages, for instance, have few wants, but even these are not satisfied. If, however, "the catalogue of their wants could remain invariable," and if they were "fed to satiety and clothed to satiety," then "(all new wants being excluded by the hypothesis) the final sum of their wealth would be reached, and all further production would be useless." "

The same is true of more civilized society. "It is the infinite variety of wants, and of the kinds of commodities necessary to their gratification which alone renders the passion for wealth indefinite and insatiable. In the case of each species infima, as logicians call it, the desire is limited."

Lloyd now proceeds to apply these observations to the question of utility and value. He has pointed out that "an increase of quantity will at length exhaust, or satisfy to the utmost, the demand for any specific object of desire." What now, he asks,

¹ A Lecture on the Notion of Value, p. 7.

² Ibid., p. 8.

^{*} Ibid., p. 9.

happens, with respect to value, at the time the demand or want is thus fully satisfied. "It will be found that, in the case of every commodity, its value vanishes at the very instant of satisfaction." In the case of water, for instance, when we have more than we need, we have no reason "for being sparing in its use, for hoarding it, or for making a property of it or debarring others from the use of it." These considerations "are sure indications of value, and according to their intensity, so is the intensity of the value." Lloyd concludes, then, that "in the reasons which exist for preserving and for retaining the possession of an object, its value essentially consists. It has with great propriety been defined to mean the esteem in which an object is held." 3

Our author thinks, however, that some further details are necessary to make this definition complete and easily intelligible. This leads him to give an illustration in almost precisely the same words that were used almost forty years later by the reputed authors of the marginal-utility theory. The passage is as follows:

Let us suppose the case of a hungry man having one ounce, and only one ounce of food at his command. To him this ounce is obviously of very great importance. Suppose him now to have two ounces. These are still of great importance; but the importance of the second is not equal to that of the single ounce. In other words he would not suffer so much from parting with one of his two ounces, retaining one for himself, as he would suffer, when he had only one ounce, by parting with that one, and so retaining none. The importance of a third ounce is still less than that of the second; so likewise of a fourth, until at length, in the continual increase of the number of ounces, we come to a point when 'through that infallible specific, eating,' the appetite is entirely, or nearly lost; with respect to a single ounce, it is a matter of indifference whether it is parted with or retained. Thus, while he is scantily supplied with food, he holds a given portion of it in great esteem, in other words, he sets a great value on it; when his supply is increased, his esteem for a given quantity is lessened, or, in other words, he sets a less value on it.4

Lloyd proceeds to explain the elasticity of wants by a metaphor which is not frequently found in modern treatises:

¹A Lecture on the Notion of Value, p. 10.
²Ibid., p. 10.
⁴Ibid

^{*} Ibid., p. 11. * Ibid., p. 12.

The appetite for food may be compared to a spring, to a watch spring for example, which, when fully compressed or wound up, has the greatest tendency to expansion. By degrees as it becomes more and more actually expanded, its tendency to fly out is diminished until at length it ceases altogether.

This is true of every commodity, but not only does the same commodity diminish in importance according to the increase of the supply, but the relative importance assigned to different commodities varies:

Each different kind of human wants may, like that of food, be compared to a spring; and, in this comparison, the different wants, according to their several differences, will be represented by springs of different degrees of strength. For example, the wants which food can satisfy will be represented by a spring of great power. So also these, to supply which water is required. For representing the wants of clothing and fuel, which are obstacles not as indispensably necessary to human existence, springs of an inferior degree of power may suffice. Passing on to the artificial wants, we may represent them according to their intensities, by lesser springs of various degrees of strength.²

There are two ways, thinks Lloyd, in which the same springs may be compared. We may compare them absolutely, as when we say that the main spring of a watch is stronger than the hair spring; or we may compare their expansive forces under some modification of their actual conditions, as when "a watch is nearly run down, we may say that the main spring has scarcely more strength, that is, in its actual tendency to expand itself, than the hair spring has, when it is most contracted."

Now, utility in the ordinary acceptation of the term is measured in the first way. "We estimate the utilities of objects by the importance of the wants which they are capable of supplying, considered absolutely. . . . Water is no more useful in a ship at sea where it is scarce, than on land where it is plentiful." Here we practically state that the main spring of a watch is stronger than the hair spring. But it is not in this sense that we estimate wants when we speak of value. "The wants, on which value depends, are analogous to the tendencies of the springs, which are already in part extended, to extend

¹A Lecture on the Notion of Value, p. 12.

² Ibid., p. 13.

themselves further. They vary with every variation in the quantity of commodities, and in the consequent variation of the degree in which the absolute want is satisfied." In this sense, "the want of the most useful may be less than that of the least useful articles. Water is more wanted by a man almost dying with thirst than by another who has quenched his thirst, and desires only to wash himself. It is on want, thus estimated, that value depends." 2

When people speak of the distinction between utility and value, Lloyd tells us that there is always a peculiar danger of confusion, and it is in his discussion of this point that he reaches the conception of marginal utility. "If, to a man who has already half a dozen coats, you should offer to give another, he might probably reply that he would have no use for it. Here. however, he would speak, not of the abstract utility of the coat, but of its special utility to him under the circumstances of his wants of coats being already so far supplied. This, though not quite the same thing as value, approaches very near to it. The coat would be of no use to him; therefore, were he to have it, it would not be valuable in his estimation." "But this is very different from the utility of the coat in the general sense of utility, and ought not to be confounded with it." 3 Lloyd emphasises the fact that when we speak of utility being different from value, we use utility in the abstract sense, not in the special sense. And this special sense is truly a marginal sense, for, says Lloyd, "in its ultimate sense, value undoubtedly signifies a feeling of the mind which shows itself always at the margin of separation between satisfied and unsatisfied wants." 4

It would be difficult to put in clearer or happier language the substance of the modern theory of the relation between value and utility. It is true that we do not find the terminology of the distinction between total utility and final utility; but we find the distinction itself. Total utility is called by Lloyd "abstract utility"; while for the terminal utility of Jevons, or the marginal utility of Menger, Lloyd uses almost the very term suggested by Professor Clark. Professor Clark prefers the term "specific

¹ A Lecture on the Notion of Value, p. 15.

² Ibid., p. 16. ³ Ibid., p. 18. 4 Ibid., p. 16.

utility"; Lloyd half a century before him used "special utility" to designate precisely the same idea.

It must be confessed, indeed, that Lloyd often contrasts value with utility, as on the title-page and in various other parts of his book. But it is evident that he then always has reference to utility in his sense of "abstract utility." He realised perfectly the veritable relation of value to wants, and the analogy between value and "special utility." Thus to all intents and purposes he discovered the doctrine of marginal utility, even though he did not draw from his discovery all the conclusions which were reserved for economists of a later date.

One conclusion, however, he did draw, namely that the conception of value is something independent of, and anterior to, exchange. In the explanation that he has hitherto given of the nature of value, says Lloyd, there has been no need for a single word about exchanges. Value consists in the real importance of an object to the individual. "Objects may be of real importance to the possessor, as much in the case of an isolated individual, such as Robinson Crusoe, as in the case of a society, such as exists in England." Lloyd proceeds to give such instances, and then adds that a few examples of value, in which the idea of exchange is not concerned, can even be taken from actual life to-day. He here comes near to making what is virtually a distinction between individual and social value.

"We can well conceive an article made expressly for the use of an individual, and to him actually both useful and valuable, when to every other human being it would be absolutely useless and therefore altogether destitute of value in exchange." Such extreme cases he confesses are rare, but it is frequent to find cases in which a great part, though not the whole of the value, is lost in the exchange. So e.g., in the case of a coat made to order, or a seal marked with the crest and initials of the owner. "The same operation which renders the commodity of more value in the estimation of its owner is calculated to render it less valuable in the estimation of all other persons." Thus there may be a difference between the individual and the social value,

¹ A Lecture on the Notion of Value, p. 20.

² Ibid., p. 27. ³ Ibid., p. 28.

the value to a particular individual and the value to the group as a whole, which we call value in exchange.

Lloyd calls the distinction one between absolute and comparative or exchangeable value. This is not a happy phrase; for, as it has frequently been pointed out of late, the very conception of value, or the estimate of marginal utility even to the individual, involves a comparison between wants, that is, presupposes the existence of at least two commodities useful to the same person. But in the sense in which value was ordinarily conceived to be relative, i.e. dependent on the existence of exchange between different individuals, Lloyd was perfectly correct in denying the relative or comparative nature of value. What he really meant was the distinction between generic and exchange value, or between individual and social value. The distinction itself is sound. Lloyd moreover informs us that in this sense of value—value independent of exchange—the same things are more valuable to a poor man than to a rich one.

Having thus settled to his satisfaction that value, in the sense explained, may be absolute, Lloyd proceeds to discuss whether there can be such a thing as intrinsic value. This he denies:

The term value does not express a quality inherent in a commodity. It expresses a feeling of the mind, and is variable with the variations of the external circumstances which can influence that feeling, without any variation of the intrinsic qualities of the commodity which is the object of it.²

Not only can value not be intrinsic, but the utility of an object is not intrinsic any more than value. Utility, like value, says Lloyd, is predicated of an object with reference to the wants of mankind. Ice is useful in summer, useless in winter. Still the intrinsic qualities of ice are at all times and in all places the same.

Lloyd then proceeds to mention some further problems which flow from these distinctions, but relegates their discussion to future lectures. These other lectures have, so far as we know, not been preserved, or at all events, they have not been pub-

² Ibid., p. 31.

A Lecture on the Notion of Value, p. 28.

lished. Yet this single lecture, which seems to have passed entirely unnoticed even by his contemporaries, is sufficient to vindicate for its author the proud position of having been the first thinker in any country to advance what is known to-day as the marginal theory of value, and to explain the dependence of value on marginal utility. With Lloyd and Jevons before us we should no longer speak of the Austrian theory of value. England must henceforth be considered the home, not only of the cost theory, but also of the marginal-utility theory of value.

4. The Critics.

In the preceding sections attention has been directed to the group of writers contemporary with, and immediately subsequent to, Ricardo. Some of these, like Torrens, we have found to be the originators of doctrines usually ascribed to Ricardo; while others like Craig accepted, but only with considerable reservations, the chief Ricardian doctrines. In the controversy that arose during the early twenties on the subject of value we found that important criticisms of the Ricardian theory were advanced by Bailey and Cotterill, and that the foundation stones for an entirely different theory were laid by Lloyd, the originator of the marginal-utility doctrine of value.

We come now to another group of writers who flourished during the twenties and thirties and who, while not neglecting the theory of value, endeavoured to cover the whole field of theory and practice of economics as it was then understood. Most of these were more or less bitter opponents, or at least severe critics, of Ricardo, and some of them made notable contributions to the science—none the less notable because they were passed over at the time, and have for the most part remained unnoticed up to the present.

Beginning with the authors of somewhat less significance in this list, let us turn our attention for a moment to John Rooke, who published in 1824 An Inquiry into the Principles of National Wealth, Illustrated by the Political Economy of the British Empire. This volume of almost five hundred pages differs from the ordinary manuals of economics chiefly in the fact that it devotes much space to the historical and practical aspects of the

various problems with which it deals. Much of the work is prolix and complicated, but there are a few points of theory which deserve to be mentioned.

In the first place, Rooke sets forth the theory of rent, and claims that he was the first in the field to advance the correct doctrine. In a subsequent tract devoted entirely to the substantiation of his claim, Rooke outlines the details of his discovery.

He tells us that the political events of 1811 and 1812 led him to study closely the economic basis of English prosperity, and to publish in *The Farmers' Journal* in 1814 and 1815 upwards of fifty essays, forming the substance of his *Inquiry*, which appeared a decade later. In his first essay, published in July, 1814, he discusses the cause of the rise in the price of corn. In the fourth essay, written in November, 1814, and published in February, 1815, he maintains the doctrine that "the cost of producing corn on the worst soils is the regulator of natural price," and that "the rent of land is the clear surplus produce which remains after the expenses that conduce to production and the ordinary profits of capital are deducted." In a fifth essay he contends that the price of agricultural labour is a sufficient test of the value of money.

The claim of Rooke seems to be well founded so far as the essays of Malthus and West are concerned. In fact, the essay of Rooke antedates that of Torrens.² There seems, in fact, to be little doubt that the doctrine of rent was developed practically simultaneously by Malthus, West, Torrens and Rooke in 1814; but so far as the priority of actual publication is concerned, the above list must be reversed, and in the interests of historical accuracy, Rooke and Torrens must hereafter be accorded the position which they deserve.³

Apart from the emphasis laid on the doctrine of rent, the

¹Claim to the original Publication of certain new Principles in Political Economy addressed in a Letter to E. D. Davenport, Esq. By John Rooke, author of An Inquiry into the Principles of National Wealth. London, 1825.

² See above, p. 71.

^{*}This does not imply any derogation from the reputation of Ricardo. The real father of a doctrine is, after all, he who sees the important implications of a theory, who works them out in detail, and who makes them fit into his whole system of thought.

chief claim of Rooke to recognition by modern writers is the fact that he is the first to lay down the rule of marginal cost as a universal principle. He puts the theory in the following words:

It is a general rule in the production of every marketable article that the last additional portion, added to the whole supply, will do no more than repay the cost of labour and the remuneration of the capital employed in its production. In case any commodity allows more than this, the supply will naturally increase; and if the market value does not, upon an average, allow these two component parts of cost, the supply will diminish.

It is this universal and active principle, diffusing and extending itself in every direction, which regulates the relations and proportions of political economy. Necessity marks out the natural bounds of value. and consumption and production are universally accommodating themselves to this first law, constantly regulated by the last additional portion of production, in reference to the demand. . . . The actual demands of the market determine the supply, and the supply is regulated by the lowest cost at which it can be brought to market.

Rooke confesses that this view differs from the principles enunciated by Malthus and Ricardo, but thinks that "these able writers have not paid sufficient attention to the natural predicaments in which man is placed." 2 He shows his independence of Ricardo in other respects also, especially in his criticism of the historical portion of the theory of rent,3 and in his objection to the neglect by Ricardo of temporary and incidental as opposed to permanent and abstract causes in the settlement of the money problem.4 Although, like all his contemporaries, he does not make the correct distinction between profits and interest, he comes nearer to it than most of the other writers, and points out that it is a mistake to speak of a general rate of profits as a return for capital. Since risk and expenses of repair vary considerably in particular instances, "the rate of profits is greater or less in proportion to risk and repair." He adds: "It is not then in the actual employment of capital or hoarded labour that we are to look for a general rate of profits; but in the rate of income obtained for the use of it, or the annual interest of money loans "5

¹ An Inquiry, etc., p. 26.

^{*}Ibid., p. 27.
*Ibid., pp. 65 and 79.

⁴ Ibid., p. 300.

^{*} Ibid., p. 38.

The fundamental proposition upon which Rooke's entire volume is based, is that the formation of capital is continually accumulating new stores of wealth, and thereby cheapening the means of living. Although population tends to increase, "capital is constantly setting free the means of subsistence faster than population has advanced." 1 Hence all opposition to the introduction of new machinery is misplaced, even though it frequently happens that the immediate results are distress to the workmen:2 "It would certainly betray a want of proper feeling if he did not commiserate the misfortunes of a body of men so numerous as the hand-weavers of plain cotton goods originally were." 3 Rooke tells us that we must look to ultimate, not immediate, results, and adds: "To suppose that man can be injured by forcing the elements into his service betrays a want of those reasoning faculties which enable us to overcome the imposing obstacles in our way." 4

As against the optimistic conclusions of Rooke and the dominant school of economists, there arose during the twenties and the thirties a school of critics known as the Ricardian socialists. These writers have been made familiar to us by Foxwell.⁵ and therefore need no detailed mention here. There is, however, one exception, who seems to have escaped the notice of Foxwell—and that one, curiously enough, the earliest advocate of the theory of surplus value subsequently adopted by Marx. Percy Ravenstone wrote in 1821 a volume of almost five hundred pages, entitled, A Few Doubts as to the Correctness of some Opinions generally entertained on the Subjects of Population and Political Economy. We shall not stop to dwell on his criticism of Malthus, which does not materially differ from the other works of the kind. In a separate chapter, however, he discusses the rights of property, and finds herein the source of most of the evils which Malthus ascribed to the pressure of population. Ravenstone, indeed, is not a communist, for common property. he thinks, implies tyranny, and would lead to the worst possible form of government. In fact, it could exist only "amongst a

¹ An Inquiry, etc., p. 41. ² Ibid., p. 115.

In his Introduction to Menger's The Right to the Whole Produce of Labour.

⁴ An Inquiry, etc., p. 117.
⁵ Ibid., p. 115.

small number of crazy fanatics." 1 Nor is private property in itself wrong. The natural right to private property is "the right to the work of one's own hands." "But this right is very different from that artificial right by which a man is enabled to appropriate to himself the ownership of lands which he does not occupy, and on which he does not exercise any industry." 2 "On this pretension of the landowner are built the pretensions of the market-manufacturer, of the tradesman, of the capitalist. All are founded on the same principle." 3 They all claim a share in the earnings of the real producer, and "the labour of the industrious is made subservient to the maintenance of the idle. The labourer must purchase the permission to be useful." The rights of property, says Ravenstone, while undeniable, are far less sacred than the rights of industry,* for the latter are independent of society, derive from a higher source, and owe their origin to nature itself, being as sacred as our existence. Unfortunately, thinks Ravenstone, in modern society, where property alone confers power, its rights are considered more sacred than those of industry, and the interests of the poor are sacrificed to those of the rich.5 "Some doubt of the correctness of the modern doctrines of political economy, of the advantages arising from capital, may be suggested by the consideration that in all countries where there is the most wealth, there is the most miserv."6

This general proposition leads Ravenstone to analyse more carefully rent and profit, which he considers equally indefensible in their modern form. Rent he defines as the idle man's share of the industrious man's earnings. He goes on to explain, however, that it is "the excess of rents, not their existence, which overthrows society." Taxes, again, as they are levied in England, fall chiefly upon the labourer. But the principal enemy of the labourer at present is the private ownership of capital. Profit, like rent; capital, like property in land, "equally arise from the surplus produce of the cultivators' labour. The only difference is that rent shares directly, profit indirectly, in

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<sup>1</sup> A Few Doubts, etc., p. 197.
<sup>2</sup> Ibid., p. 199.
<sup>3</sup> Ibid., p. 200.
<sup>4</sup> Ibid., p. 204.
<sup>5</sup> Ibid., p. 206.
<sup>6</sup> Ibid., p. 206.
<sup>8</sup> Ibid., p. 206.
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the earnings of the productive labourer." 1 It is worthy of remark that while Ravenstone is thus the first predecessor of Marx to advance the surplus-value theory, Marx differs from Ravenstone in that he considers profit to be the direct, and rent the derivative, form of exploitation.

As our concern, however, is here with the economists proper, rather than with their socialist critics, we shall not dwell longer on the interesting development of the fundamental idea of Ravenstone. Enough has been said to show that in him we have really the earliest of that group of writers who, during the twenties, sought to undermine the very basis of the edifice so carefully erected by the economists.

A few years later than Ravenstone, and doubtless inspired by other socialist ² publications, one of which is quoted at great length, Samuel Read wrote An Inquiry into the Natural Grounds of Right to Vendible Property or Wealth.³ This differed in its point of view from the current school of political economy. Read had started out during the currency discussion with several tracts on moncy and banking, and it was in connection with one of these that he accused McCulloch of plagiarism in a pamphlet of considerable vehemence.⁴

A year or two later he published the reply to Malthus in a

¹A Few Doubts, etc., p. 311.

² Such publications were at this time called "labour publications."

³ Edinburgh, 1829, 328 pp.

⁴This was entitled Exposure of certain Plagiarisms of J. R. McCulloch, Esq., Author of two Essays on Reduction of the Interest of the National Debt, committed in the last published of these Essays, the Scotsman Newspaper and Edinburgh Review. By Samuel Read, author of a Tract on Money and the Bank Restriction Laws. In recto decus. Edinburgh, 1819. Read pointed out that between McCulloch's two Essays on the National Debt which appeared in March and November respectively of 1816, his tract on money had been published in May, and he claimed that the change of front in McCulloch's second essay was due to an unacknowledged appropriation of his own suggestions. These suggestions were first, that in readjusting the currency the rule of justice is that debts should be considered discharged by the offer of the exact weight of bullion represented by the nominal sum of currency stipulated at the time the contract was made (p. 4); and secondly, that the interest on the debt contracted subsequently to the depreciation of the paper money should be so reduced that the creditors would receive precisely the amount of actual bullion which they lent (p. 19). Read also accused McCulloch of borrowing without acknowledgment passages from other authors, including Hume (p. 31).

tract 1 which advances for the first time the doctrine, anticipating the modern biological theory, that powers of increase in population are themselves weakened and diminished by the force of luxury and refinement. In his larger work, Read claims that he differs from his predecessors in that he discusses not only the question, "what is, or what has been," but also "what should be." 2 Political economy heretofore has been declared to be the science which treats of the production and distribution of wealth; Read wishes to treat of it "as an investigation concerning the right to wealth." 3 These rights, moreover, are not legal rights; for in the existing state of society "a legal right is not infrequently a natural and moral wrong." 4 It is in accordance with this conception that Read entitles his work an Inquiry into the Natural Grounds of Right to Vendible Property. In reading these and similar passages we are forcibly reminded of the views of Sismondi, as well as of the modern ethical school of economists.

In the body of his work where he attempts primarily to explain "what is," Read shows himself a great admirer of Adam Smith as against the "dogmas and paradoxes" 5 of Ricardo and the "Ricardo school." 6 His excellent definition of wealth deserves to be quoted: "Those external, material objects . . . useful to mankind, which it costs some exertion of human labour ... to produce or acquire ... and which ... can be transferred from one to another." In a succession of paragraphs he emphasizes, quite in the spirit of the most approved modern treatises, but partly in opposition to most of the text-books of his day, the fact that wealth does not include free, internal, useless, or unappropriable goods.8 He follows Smith in making the distinction between productive and unproductive labour, but proceeds to explain it away, as in his acceptance of Scott's contention that an author may be a productive labourer.9 He gives a definition of capital which is of interest in view of the recent theories of Fisher and Cannan, saying that "capital consists of

¹ General Statement of an Argument on the Subject of Population in answer to Mr. Malthus's Theory. By Samuel Read. London, 1821. See esp. pp. 13 and 32.

² An Inquiry, etc., p. xxvii.

^{*} Ibid., p. ix.

Ibid., p. xxiv.

⁵ Ibid., p. vi.

^{*}Ibid., p. 244.

⁷ Ibid., p. 1.

^{*} Ibid., pp. 2-3, 7-9.

^{*} Ibid., p. 41.

accumulated wealth, which is or may be applied to assist in the work of production, which is nearly equivalent to saying that it consists of all wealth whatever." He adds in a note that "there is no real use in the distinction which has been attempted . . . between stock or wealth generally or capital."

Read's opposition to Ricardo is shown in many ways. He criticises unreservedly the statement that labour is the sole cause of wealth. He considers this "a most mischievous and fundamental error," mischievous largely because of the conclusions that have been drawn from the principle by the "labour writers." Read is the first thinker clearly to perceive that through this theory of value the Ricardian economics leads logically to the Ricardian socialism. Marx, like his predecessors in England, based himself frankly on Ricardo, and drew from Ricardo's labour theory of value a seemingly logical conclusion of social poltics, which is at the very antipodes of that of the Ricardian economists.

Read confesses that in his main point of theory he has been anticipated by Bailey, the author of the Critical Dissertation;3 but Bailey, as will be remembered, had paid no attention to the application of the theory made by the Socialists. Wealth is not the result of accumulated labour, says Read, but of labour and capital. Capital is incorrectly described as accumulated labour, for labour cannot be accumulated. Moreover, in every period of society, except in the very origin, all accumulations of wealth have been made with the existence of previous accumulations of capital-accumulations not of labour, nor even of the effects of labour.4 "If it should be said that capital could not do what is done without the assistance of labour, neither, I reply, could labour do what is done without the assistance of capital." 5 Read confesses, indeed, in another place, that whereas capital can produce nothing without labour, labour can produce something without capital; but he makes his meaning clear by adding that when we come to ask how much either labour or capital can produce unaided we see at once the futility of the distinction.6 For it is obvious that in the present state of society far more is

¹ An Inquiry, etc., p. 65.

² Ibid., p. xxix.

[•] Cf. above, p. 83.

⁴ Ibid., pp. 14-15.

^{*} Ibid., p. 84.

Ibid., pp. 129-130.

due to the productive force of capital than to the productive force of labour. Hence such writers as the author (Bray) of Labour Defended against the Claims of Capital, whom Read quotes copiously,1 are wide of the mark in claiming that since labour, according to the Ricardian theory, is the sole cause of value, the whole produce of labour, that is, all accumulated wealth, belongs to the labourer, and that rent and profits are robbery. It is McCulloch, even more than Ricardo, who, according to Read, is responsible for these perverted views on the part of the socialists or "Labour Theorists."

While Read criticises the contentions of the socialists, however, and emphasizes the need and efficacy of capital, he is by no means unaware of the exaggeration in the extreme claims of their capitalist opponents. "The labourers have been flattered and persuaded that they produce all, whilst the capitalists on the other hand have combined and established laws of preference and favour which really tread upon the rights of the labourers."2 "On the contrary," says Read, "while the labourers must be made to understand that they do not produce all, whenever they seek the assistance of capital; the capitalists lending that assistance must be equally instructed that . . . no individual can have a right to exclude or interdict others from coming forward or to attempt to enhance their gains by means which are unjust or injurious to their neighbours." 3

Accordingly, while private property in land is defensible, because of the application of capital to land, there is a certain degree of truth in the contention that there is a common right to the "bare uncultivated earth, unappropriated and unimproved by labour."4 Read concludes from this that a moderate part of the annual produce of the land should be paid to the Government in the shape of a land tax or quit rent. Such a fund, which should not amount to more than twelve per cent. of the rent

¹ Ibid., chap. ix., sec. iii., pp. 118-140 et al. For Bray's tract see Foxwell's introduction to Menger's Right to the Whole Produce of Labour. Foxwell does not refer to Read's criticism.

[[]For a later and fuller study see the work of one of my students, Dr. Esther Lowenthal, The Ricardian Socialists in the Columbia Studies in History, Economics and Public Law, no. 114, 1911.]

² An Inquiry, p. xxix.

^{*} Ibid., p. xxxiv. * Ibid., p. 107.

would, in Read's opinion, obviate the necessity of any other taxes except in extraordinary emergencies.1 Read thus becomes a modern single-tax advocate. Another project is the assertion of a full legal provision for the support of the poor, which should include weekly payments not only to the aged and infirm, but also to the unemployed.2 "The right of the poor to support, and the right of the rich to engross and accumulate. are correlative and reciprocal privileges, the former being the condition on which the latter is enjoyed." 8

Read's general opposition to Ricardo is seen in a number of other points. He accepts Adam Smith's theory of rent in preference to that of Ricardo. He characterises as "futile and absurd" 4 the statement of Ricardo that rent is paid for the "original and indestructible powers of the soil," and he points out how, in a later edition, Ricardo has "studied himself fairly out of" this theory.⁵ He is unsparing in his criticism of Ricardo for the neglect of the element of situation, rather than of fertility in the rent problem; and he maintains that because rent is the consequence, not the cause, of high price, it by no means follows that rent is not a component part of price. "Rent actually does form a constituent part of the price of commodities." The Ricardian theory of natural wages is equally erroneous, says Read, because Ricardo fails to observe the possibility of a continual rise in the standard of life. "Not only is it natural that mankind should increase their numbers and quite possible for them to do so indefinitely, and to increase their wealth and the price of their labour at the same time, but . . . such a progress is the natural and necessary course of things under any tolerable system of liberty or security or good government."8 "The natural price of labour is, therefore, not a fixed quantity, as Ricardo thought, but a constantly increasing quantity." This result, in Read's judgment, is very largely due to the increasing productivity of capital. Finally, the effort of Ricardo to show that profits and wages vary inversely to each other is, according to Read, equally unfortunate.10

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<sup>1</sup> An Inquiry, etc., p. 111.
<sup>2</sup> Ibid., pp. 361, 365.
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[•] Ibid., p. 375.

⁴ Ibid., p. 293.

⁵ Ibid., p. 296.

[•] Ibid., pp. 298-301. • Ibid., p. 243.

^{*} Ibid., p. 252. • Ibid., p. 253.

¹⁰ Ibid., p. 249.

Not the least striking part of Read's constructive work is his attempt to identify profits with interest. He does not, of course, deny the existence of "business gains," but he thinks that all such gain as exceeds the ordinary rate of interest "is either wages—that is, remuneration or reward for labour or industry or ingenuity or skill in the use and application of that capital or otherwise it is the result of fortune or accident—that is, of secret and unknown causes." 1 Such causes "sometimes occasion greater or less gain in trade, or no gain at all, and sometimes a loss," and ought to be properly considered as a compensation for risk. This compensation for risk must not be confounded with the wages of labour or with the "profit ordinarily derivable from capital." Since, therefore, such accidental gain is regulated by no certain principle, it is "without the pale of political science, which is conversant alone with known and determinate causes, rejecting others with disdain."

This passage is interesting. Read indeed uses the word profit as identical with interest for the reason given above. although he at once recognizes the objection to this nomenclature, and suggests as a possible substitute the term "rent of capital." 2 But the real importance of the passage lies in the fact that in his description of gain "which lies without the pale of science," we have the origin, in England at all events, both of the modern "risk theory" and the modern "entrepreneur theory" of profit. Had Read not been so reluctant to transcend the "pale of science," the analysis at which he hints would doubtless have been developed with his customary acumen and common sense.

In his last chapter Read discusses the subject of public finance. His theory of incidence of taxation is opposed to both the Physiocrats and the Ricardians. "The old French economists who still have a few followers, maintain, that all taxes fall wholly upon the land, or upon rent, denying that either profits or wages afford any; the Ricardo economists again contend that taxes fall entirely upon rent and profit, denying in like manner that wages afford any." Read asserts that both of these opinions are erroneous, and that the theory set forth by Smith and Hume alone is sound -the theory "that all three distinct sorts of revenue afford An Inquiry, etc., p. 263. ² Ibid., p. 264, note.

taxes." ¹ Taxes on wages are shifted only when wages are at the real minimum of subsistence, a condition which is not found in general. ² Being such an admirer of Hume, it is not strange, perhaps, that Read should accept Hume's theory that taxes when "moderate and laid on judiciously and slowly" may, at first, by exciting a "spirit of industry where it was before wanting, be for a time rather useful and advantageous." ³ Like Hume, however, he thinks that taxation often passes this limit and proves a sensible and even grievous burden on the mass of the people.

It is evident from this review that Read merits further study. Although in the main a conservative and almost an orthodox economist, notwithstanding his objections to the Malthusian theory, Read deserves recognition in four particulars: he is an acute critic of some of the weak points in the classical theory of distribution; he is the first economist to show the connection between Ricardian economics and Ricardian socialism; he is in part the originator of the risk theory of profits, and he is above all the first English economist who, while unreservedly recognising the function of capital, emphasizes the fact that the capitalist has duties as well as rights, and that economics is a science not only of what is, but also of what ought to be.

Of considerably less originality than Read, but, nevertheless, worthy of mention, is Sir George Ramsay, who published in 1836 an elaborate volume, An Essay on the Distribution of Wealth.⁴ Ramsay's chief claim to attention is to be found in the fact that he attempted, but with meagre results, to introduce into England conceptions which had become familiar to the French economists. He adopts from Destutt de Tracy the consideration that production means either change of form or change of place,⁵ although he points out later that there is a third fundamental change, namely, change of time. It is, accordingly, to Ramsay that we must ascribe the first statement in English of the division into form, place and time value, a distinction which modern writers usually credit to Knies. Ramsay also borrows from the

5 An Essay, &c., p. 17.

³ Ibid., p. 381. ⁴ This was published at Edinburgh as a volume of 506 pages. Ramsay wrote a number of other works, primarily on political and philosophical topics.

French writers, and especially from Storch, the Russian economist, the conception of the entrepreneur as separate from the capitalist. He distinguishes carefully between that part of the gross profits of capital which takes the form of interest or net profit paid for the use of capital, and the remainder which constitutes the "profits of enterprise." Not venturing to use the term entrepreneurs, Ramsay suggests the word masters. He is at first inclined to speak of this share in distribution as "Profits of the Master," 1 but finally decides upon the term profits of enterprize, or, as he spells it elsewhere, enterprise.² The masters, he thinks, must not be confused with the capitalists, although when we speak of gross profits, we mean the return of the mastercapitalists.3 The net profits of capital or interest is a compensation for the use of capital while the masters' return or profits of enterprise is the compensation for the trouble and risk incurred. and for the skill exerted in the business of direction and superintendence.4 Ramsay devotes almost a quarter of his work to an analysis of these two constituent elements of profit. return to capital proper, or interest, is not regulated, as the current theory states, by the competition of capitals, but is ultimately fixed by the "productiveness of industry," and not by the productivity of industry in general, but chiefly by the return to those branches of industry employed in producing the necessaries of the labourer and the various elements of fixed capital.⁵ "The only competition which can affect the general rate of gross profit is that between master-capitalists and labourers."

The profits of enterprise are made up of three parts—the salary of the master, insurance for risk, and surplus gains.6 The surplus gains, thinks Ramsay, increase in a greater proportion than the capital employed.⁷ This leads him to a consideration of the subject of "concentration of capital." His analysis, quite in the French style, brings him to the conclusion that combination means economy of management and a more rapid increase of natural wealth.8 But this does not exhaust the question of its desirability, "for we must always bear in mind that the matter

¹ An Inquiry, etc., p. 193.

² Ibid., p. 208.

^{*} Ibid., p. 79. * Ibid., p. 190.

⁸ Ibid., p. 206; cf., p. 154.

⁶ Ibid., p. 226.

⁷ Ibid., p. 229.

[·] Ibid., p. 240.

in which riches are divided and distributed is a matter of no less consequence than their absolute quantity." ¹ It is chiefly because some economists have devoted too exclusive an attention to production, rather than to the question of distribution, thinks Ramsay, that the science of wealth is now beginning to be "covered with unmerited obloquy." ²

In other points Ramsay is more influenced by the English than by the French writers. He refuses to accept Say's conception of immaterial wealth, and adopts unreservedly Smith's distinction between productive and unproductive labour.3 In many cases, however, he tempers his approval of the English doctrines with some reservations which seem to show the influence of Read. He follows Ricardo and Malthus in his treatment of the problem of wages and population; but he is careful to emphasize the effect of the standard of life on wages, and he questions the existence of a "natural or necessary price of labour" in the sense of a minimum of subsistence.4 He shows a commendable sympathy with the factory laws, although he bases his defence on the theory that since the ratio between capital and population remains the same, labourers who work short hours will not receive any less than those who work long hours.5 He accepts the theory that profits vary inversely as wages, but claims that this is not the whole truth.6 For since, as has been pointed out above, profit varies directly as the productivity of labour and capital, if productivity increases, both profit and wages may be high. High profits due to increased productivity are a benefit to the community; high profits resting on low wages are a menace. For.

the object of political economy being to show, not only how the greatest amount of wealth may be obtained, but also how it may be distributed most advantageously among the different classes of society, that must be allowed to be a strange system which would give as little as possible to by far the most numerous body of all, the labourers.

Ricardo's whole theory he deems incomplete, because Ricardo overlooked the fact that "the ultimate cause of the variation in

¹ An Essay, etc., p. 243.

² Ibid., p. 245.

⁸ Ibid., pp. 31-32.

⁴ Ibid., p. 133.

⁵ Ibid., pp. 100-102.

⁶ Ibid., p. 141.

[&]quot;Ibid., p. 143.

money wages, and hence in profits, is a change in the productiveness of industry." 1

In two other points Ramsay foreshadows recent discussions. He accepts the classical theory of rent, but maintains that the rent paid on the worst land devoted to a particular use virtually enters into the price of some other use, or the produce of some other use, of the land:

Although rent unquestionably owes its origin to a high price of corn, or whatever may be the principal vegetable food of the people, yet when once created, it prevents the supply of other productions of the soil, such as animals and grass for the subsistence of animals, from becoming immediately equal to the demand, and so keeps up the price until they rise sufficiently to give as good a rent as corn. In this manner the rent paid for one species of produce becomes the cause of the high value of others. Rent, then, in its origin is an effect of high price, but afterwards becomes itself a cause of the high price of various objects of rural industry.²

This is the entering wedge of the overthrowal of the doctrine that rent does not enter into price, and is virtually the same theory as that advanced by Marshall in the later editions of his *Principles*. It is not to be wondered at that Ramsay does not recognise the full bearing of the concession, for neither does his distinguished, but unconscious, follower. It is interesting nevertheless, to note the origin of the idea.

The second point is the importance attached by Ramsay to the element of time in production. In his discussion of value he maintains that the principle that value depends on the quantity of labour is very considerably modified by the use of capital. Commodities "in which the same quantity of labour has been expended may require very different periods before they are fit for consumption." ³ He takes as an example two casks of identical wine. The cask which is kept in the cellar for several years increases in value; and since the cask of wine "constitutes a fixed capital," the increase of value is due "to a capital withheld." ⁴ Therefore value depends not only on labour expended, but "on the length of time during which any portion of the pro-

¹ An Essay, etc., pp. 174-175.

² Ibid., pp. 278-279; cf. a similar passage on p. 463.

³ Ibid., p. 43.

^{*} Ibid., p. 44.

duct of that labour has existed as a fixed capital." In this, says Ramsay, we see the real importance of capital in the process of production.

Finally, attention must be called to a remarkable passage in the closing chapter devoted to the practical conclusions from Ramsay's principles. Ramsay maintains that, were the corn laws to be proposed as a new system, he would certainly oppose them; but now that the whole agriculture of England has been built up on them, he deprecates their entire abolition, because it will mean a sacrifice of agricultural to industrial prosperity. For it is very questionable, thinks he, whether this industrial prosperity, founded on a temporary monopoly, will endure. He adds:

Mr. Malthus has remarked that it cannot be considered a natural, that is, a permanent state of things, for cotton to be grown in the Carolinas, shipped for Liverpool, and again exported to America in its finished condition. The time must come when the United States will fabricate for themselves. The same observations may be applied to other nations. It is quite clear that, unless there be some extraordinary natural advantages peculiar to Great Britain, it cannot have any right to suppose that it shall always supply the greater part of the world with manufactures at a cheaper rate than that at which they can be raised in the respective countries. Much less is it entitled to imagine that no other people can ever come into competition with it, and furnish neighbouring or distant lands on as cheap terms as itself.²

The question as to how far it was entirely wise for England to sacrifice her agriculture to her industry 3 has not yet been definitely answered. The events of the next quarter of a century will put us in a better position to reply. But in view of the

¹ An Essay, etc., p. 59; cf. p. 29.

² Ibid., p. 496.

That this would be the result of the teachings of the Ricardians was clearly perceived at the time in England. One of the most vehement opponents of the "manufacturing economists," as he calls them, was the author of the tract entitled: Four Letters to Earl Grey, to beware of the Economists. London, 1830. The author points with withering scorn "to what extent these Economists would change the whole structure of this country; with what cool indifference they would transfer a million of cultivators to the hot steaming atmosphere of a cotton mill, or to the damp weaving room of a Lancashire manufacturer" (p. 24). The author uses as a motto of his work the statement as to rent published by James Anderson in the Bee in 1791, which he hints was plagiarised by the "Ricardo school," although he claims that they drew from this theory of rent conclusions exactly opposite to those of the real discoverer of the theory.

"Back to Protection" or "Retaliation" cry which is now so loudly voiced in Great Britain, the arguments of Ramsay are far from untimely.

5. The Marginalists.

The last of the group of writers to be discussed is one who is in some respects the most remarkable of all—Mountifort Longfield. In 1832 a professorship of political economy was founded by Archbishop Whately under conditions similar to those of the Drummond professorship at Oxford. Whately succeeded Senior in the Oxford position in 1831, and published in the following year his *Introductory Lectures on Political Economy*; in which, as is well known, he proposed to substitute for the name Political Economy that of Catallactics.¹

When Whately was called to Dublin as an ecclesiastical dignitary, his interest in his old subject was so strong that he proceeded forthwith to endow a chair of political economy, of which the first incumbent was Longfield. The eleven lectures which Longfield delivered during his first year were published as the Lectures on Political Economy, delivered in Trinity and Michaelmas Term, 1833.² Some of his lectures during the two ensuing years also saw the light, but may be passed over here with a bare mention.³

Although there is a short notice of Longfield in Palgrave's Dictionary, the writer has entirely missed the real contribution of Longfield to economic science.

Longfield adopts many of the doctrines of the classical school, but states that he is compelled to dissent from not a few of their fundamental notions on the distribution of wealth. Above all,

^{&#}x27;Whately's influence may be seen in a number of minor followers, as e.g., in the Letters on the Rudiments of a Science called formerly improperly Political Economy, recently more pertinently Catallactics, from Patrick Plough, a Yeoman in the Country, to his Sons Young Men in the Town. 1842.

²By Mountifort Longfield, LLD., Fellow of Trinity College, Dublin, and Professor of Political Economy, Dublin, 1834, 267 pp.

These were Four Lectures on the Poor Laws, 1834, and Three Lectures on Commerce and One on Absenteeism, 1853. Many years later Longfield wrote an essay on Irish Land Tenures for the volume published by the Cobden Club in 1870, on the Land Question.

⁴ It is to be noted, that Cannan quotes two passages from Longfield's book. Cannan, op. cit., pp. 266, 309. Cannan, however, seems not to recognise Longfield's importance in other respects.

he differs from the Ricardians on the theory of profits and its place in the scheme of distribution.1

Longfield's general theory of value is noteworthy in that he not only puts very lucidly the influence of cost of production upon the supply side of the equation between supply and demand.2 but calls attention to the demand side as well. In discussing this part of the subject, he points out that although the intensity of the demand varies with different persons, all will effect their purchases at the same rate, viz., at the market price. "Now if the price is attempted to be raised one degree beyond this sum, the demanders, who by the change will cease to be purchasers, must be those, the intensity of whose demand was precisely measured by the former price." "Thus the market price is measured by that demand, which being of the least intensity yet leads to actual purchases." 3

Longfield goes on to point out that not only does intensity of demand vary in this way, but "the same person may be said to have in himself several demands of different degrees of intensity." The consumption of food will fall off with every increase of price due to scarcity:

That portion which any person ceases to consume in consequence of a rise in price or that additional portion which he would consume if prices should fall, is that for which the intensity of his demand is less than the high price which prevents him from purchasing it, and is exactly equal to the low price which would induce him to consume it.4

Pursuing this train of reasoning through successive degrees of high price. Longfield concludes that

each individual contains, as it were, within himself a series of demands of successively increasing degrees of intensity; that the lowest degree of this series which at any time leads to a purchase is exactly the same for both rich and poor, and is that which regulates market price; and that in the case of the rich man the series increases more rapidly, that is to say, the intensity of his demand increases more rapidly in proportion to the diminution of his consumption than in the case of the poor man.

In these passages we see that Longfield virtually expounds the doctrine of marginal demand. It is this marginal idea which

¹ Lectures, preface, p. vii.

⁴ Ibid., p. 114.

^{*} Ibid., p. 47. * Ibid., p. 113.

⁵ Ibid., p. 115.

he applies to the supply side of the schedule as well, and which results in his most characteristic contribution to economics.

He tells us, for instance, that it is a great mistake to suppose that even if we accept the theory of labour as a proper measure of value, it is

necessary that the whole supply of the commodity should have its value entirely derived from the labour expended in its production. It is sufficient if some part, of equal value with the rest, can thus be as it were resolved into the labour which created it.3

He goes on to explain that in practically all commodities there exists some such portion:

That portion of every commodity whose value admits of being thus measured is that part which is produced under what I shall call the most disadvantageous circumstances; that is, under those circumstances which require the greatest expenditure of labour in order to produce any certain quantity of that commodity.2

In these passages we have an exposition of the theory of marginal cost, as well as that of marginal demand. It is in the theory of profits and interest that we find the application not only of the marginal idea, but of the productivity idea as well, thus combining to form the conception of marginal productivity.

Longfield accepts the theory of rent, as advanced by the Ricardians, but objects to the doctrine that profits are regulated by the fertility of the worst soils under cultivation. He thinks that this "ingenious theory" 3 is destitute of foundation, and that the soil has scarcely any direct influence upon the rate of profits. The error rests, in his opinion, upon an incorrect analysis of capital and its return. The essence of the service of capital consists, according to Longfield, in roundabout production. "Let us attend carefully to the important part which capital performs in the work of production, and we shall see how long a period must frequently elapse before certain labour has produced its full effects." 4

After explaining this at some length, he endeavours to analyze more carefully the conception of production as applied to capital. "Of capital, there is not, properly speaking, any cost of produc-

¹ Lectures, etc., p. 34.

^{*} Ibid., p. 182.

³ Ibid., pp. 34-35.

^{*} Ibid., p. 163.

tion, except that sacrifice of the present to the future, which is made by the possessor of wealth who employs it as capital. instead of consuming it for his immediate gratification." Longfield recurs continually to this conception of the equalization of the present and the future as constituting the real function of capital. The more quickly capital is accumulated, he tells us in another place, and the lower the return, "the first direct and most striking effect is to render the future and present period of nearly equal importance." 2 In all questions of the return to capital, we are "comparing present and future advantages."

It is evident from these passages how exaggerated is the extreme contrast sought to be drawn by Böhm-Bawerk between the "productivity," and the "agio" theories of interest. For here, in at least one writer, we have the productivity theory explained in terms of the "agio" theory. All of which impels us to the conclusion that there is far less difference between the brilliant Austrian economist and his English predecessors than is commonly imagined.

It will be seen from the above that Longfield uses profits in the sense of general returns to capital, and that his theory of profits is really a theory of interest. This brings us to the application made by Longfield of the conjuncture of the productivity theory, in his sense of the term, and the marginal theory of cost and demand.

Capital is useful, he tells us, by advancing to the workman the value of his labour before the produce is sold to the consumer, and by supplying the labourer with instruments, tools and machinery.3 The owner of the machine will be paid for the use of it in proportion to its value, the injury it receives from use, and the time during which it is lent and "not in proportion to its effect in increasing the efficiency of the labourer." This is a consequence of the principle of competition; for if the owner of one machine could obtain more for its use than the owner of another of equal value and durability, more of the former would be made until the profits of each were reduced to their level. "This level must be determined by the least efficient machine,

¹ Lectures, etc., p. 196. ² Ibid., p. 230.

^{*} Ibid., pp. 187-188.

since the sum paid for its use can never exceed the value of the assistance it gives the labourer." 1

Longfield is at great pains to explain this process more in detail. He pictures the development much in the same way as do Wieser and Clark in recent years in their description of the "imputation" theory. He uses the hypothesis that the produce of the soil is raised by labourers entirely destitute of capital. Unless they are quickly to relapse into barbarism, some tools must be used. Suppose that the capitalist now puts this first spade

into the hands of the ablest labourer he can find, paying him as wages, so much as, without the aid of such an instrument, he could earn for himself. The profits which the capitalist or owner of this instrument will reap will be the difference between the quantity of work which the labourer can do with and without its assistance. But as the number of such instruments increases, in the hands of the same or different capitalists, other and inferior labourers must be employed to use them, and according to the principle which I have just laid down, the rate of profits must be determined by those cases in which the efficiency of capital is the least; that is, on the supposition I have just made, the profits of a single tool will be equal to the difference of the qualities of work which the feeblest labourer could execute with or without its use.2

Longfield applies this reasoning to the profits of capital in general, and concludes that the return to capital is equal to the assistance given to labour "by that portion of capital which is employed with the least efficiency, which I shall call the last portion of capital brought into operation." 3 Or, as he puts it in another place, "the rate of profits may be measured by the efficiency in assisting labour of the least efficient capital." 4

¹ Lectures, etc., pp. 187-188. ³ Ibid., pp. 191-192. *Ibid., p. 227. In another passage Longfield puts the same point a little differently. He says: "If a spade makes a man's labour twenty times as efficacious as it would be if unassisted by any instrument, one-twentieth only of his work is performed by himself and the remaining nineteentwentieths must be attributed to capital. And this is the measure of the intensity of the demand for such an instrument. A labourer working for himself would find it for his interest to give nineteen-twentieths of the produce of his labour to the person who would lend him one, if the alternative was that he should turn up the earth with his naked hands; or if he worked for another, his employer might pay a similar sum for the purpose of supplying him with an instrument. But this profit is not paid, because on account of the abundance of capital in the country much must be employed in cases where in proportion to its quantity it is not so capable of multiplying the efficiency of the labourer; and the profits on this portion must regulate the profits of the rest." Ibid., p. 195.

Thus we have in the most unequivocal language the marginal-productivity doctrine of interest—a doctrine the origin of which has usually been ascribed to von Thünen, and which has been adopted and adapted by recent thinkers. Yet here again, before von Thünen published his second volume which contains the theory of interest, the identical theory had been advanced by an Englishman, or rather an Irishman. Longfield, indeed, did not pursue his analysis so far as to distinguish between profits and interest, and it is for this reason that he argues in opposition to Torrens that profits do form a part of cost of production.¹

The discovery of the marginal-productivity theory of interest is not Longfield's only claim to distinction. In his theory of wages also he marks a decided advance. The accepted theory of wages taught that wages depend on the standard of life, or on the means of subsistence. This whole Ricardian theory seems to Longfield to rest on a mistaken application of the cost-of-production theory of wages. ² The cost-of-production theory is not applicable to labour, according to Longfield, because the labourer is not produced for the sake of what he can earn." ³ The expression is merely metaphorical, and analogy, says Longfield, is not argument. The standard of life is not the cause, but the result.

The correct theory, according to Longfield, may be summed up in the statement that "the wages of the labourer depend upon the value of his labour, and not upon his wants, whether natural or acquired." He adds,

that if his wants and necessities exercise, as they do, some influence upon the value of his labour, it is indirect, and secondary, produced by their effect upon the growth of the population, and that this effect is not analogous to the effect which the cost of production has upon the price of commodities.

Wages, like the value of everything else, depends upon the relation between the supply and the demand. The supply consists of the existing race of labourers. But "the demand is caused by the utility or value of the work which they are capable of performing." ⁵ Hence follows the important conclusion that

¹ Lectures, etc., Appendix, p. 248.
⁴ Ibid., p. 206.
⁵ Ibid., p. 210.

² Ibid., p. 202. ³ Ibid., p. 203.

"wages must be paid out of the produce, or the price of the produce of their labour," and that the real element of significance is "the rate of profit and the productiveness of labour employed in the fabrication of those commodities in which the wages of labour are paid." 1

The objection might indeed be raised that in this passage Longfield is not quite clear as to the exact relation between profits and wages. Of the truth of his fundamental proposition, however, he is assured. Wages are intimately connected with product. The true theory of wages, in other words, is a productivity theory.

It is for this reason that Longfield denies the possibility of machinery reducing wages. "A machine is never resorted to except for the purpose of producing commodities more cheaply, that is, more cheaply, independent of any reduction in the wages of labour or the rate of profits." 2 New capital means lower prices, not lower wages; and since each man's wages will now purchase more than before, increase of capital virtually leads to higher wages.

A writer who holds as Longfield did to the productivity theory of wages and the marginal-productivity theory of interest must necessarily arrive at conclusions as to social progress very different from those of the Ricardian school. He agrees with Ricardo and Malthus that the productiveness of agricultural labour tends to diminish, and that the increase of population tends to raise profits and to lower wages.3 But, on the other hand, he points out that capital in general tends to increase, and the rate of profits therefore tends to decline, while the evil arising from the necessity of resorting to poorer soils may be neutralized by other circumstances, such as improvements in agriculture. Above all, a better system of division of labour and the extension of machinery in manufactures will enable the labourer to live more comfortably than before. He will gain more in this way than he will lose by the dearness of food and raw materials. For "in" the normal progress of society, if it is well governed, the rate of profits will diminish, labour will become more productive, and the relative value of each man's labour will increase." 4

¹ Lectures, etc., p. 215. ² Ibid., p. 219.

³ Ibid., p. 235.

⁴ Ibid., p. 239.

With this far from pessimistic conclusion as to the future of industrial society, Longfield closes his remarkable lectures.

The productivity theory of wages and the marginal-productivity theory of interest as expounded by Longfield seem to have passed unnoticed except in Ireland itself. Longfield was succeeded as Whately professor at Dublin, by Isaac Butt, who accepted his predecessor's conclusions as a henceforth wellestablished part of economic theory. In a monograph entitled Rent, Profits and Labour, 1 Butt repeats and develops the doctrine. He speaks of the "most important additions to the discoveries of the science made by my predecessor," and addresses himself in particular to the most difficult question. "What is it that will regulate the exchange between things both produced by the joint operation of labour and capital." 2 Butt proceeds to point out at some length that "by the assistance, the powers of labour are multiplied, in different degrees, in a descending scale, descending as capital multiplies." "The least efficient assistance which the powers of capital actually render to labour is at once the check and the measure of the fall which the competition of capitalists has caused." "The relative value of labour and capital will be determined by that part in the scale at which all the capital in the country can be employed." 3 And after giving numerous examples, Butt claims that what is shown by this method of reasoning is "the relation between the product of the powers of capital and the product of unassisted labour; and this, of course, gives us the proportion in which the joint product is divided between the capitalist and the labourer." 4

¹The full title of this pamphlet is Rent, Profits and Labour. A Lecture delivered before the University of Dublin in Michaelmas Term, 1837. By Isaac Butt, LL.B., Dublin, 1838. Butt also published a larger Introductory Lecture delivered before the University of Dublin in Hilary Term, 1837. By Isaac Butt, LL.B., M.R.I.A., Archbishop Whately, Professor of Political Economy, Dublin, 1837. In this Introductory Lecture, Butt follows Say in defining production as the "creation of utility," rather than the "creation of value" (p. 6), and is especially severe on those economists who wish to limit the term wealth to material objects. Immaterial, like material objects, are equally forms of wealth. The copyright of a book, the pleasures derived from a painting, the command of a pleasant prospect which enhances the rent of a house—all these are immaterial products which constitute wealth (p. 36). (Cf. 57-58.) But also objects to identifying capital with instruments of production (p. 55). Both here and in other passages he makes long quotations from his unpublished lectures in the same course.

² Rent, Profits and Labour, p. 21.

^{*} Ibid., pp. 23-25.

⁴ Ibid., p. 26.

In very much the same way as Professor Clark, Butt contends that "by a parity of reasoning we can calculate the relation between the product, whether of human labour, or of the powers of capital, and the product of a natural agent." For he has already shown how the value of labour can be expressed in that of the powers of capital, or the value of the powers of capital in those of labour. It remains to show "how the value of a natural agent can be expressed in the terms of either." 1 This he does through the use of the theory of marginal production as contained in the doctrine of rent.

The general principles of exchange are summarised by Butt in the following statement:

The product of any given quantity of labour will exchange for the product of so much of the powers of capital as render to production an assistance equivalent to that labour, at the lowest rate of assistance to which capital is forced by its abundance to have recourse.

It will exchange for as much of the produce of the soil as could be raised by that labour, or the equivalent powers of capital, at the least productive expenditure to which the demand for produce has compelled the community to resort.2

Butt informs us that in the following lecture he proposes to apply these principles to the condition of the labouring class, and to make other practical applications of the doctrine. So far as we know, however, these lectures, which would assuredly have been most interesting, have not been published.

The theory of marginal productivity as applied to capital and labour, Butt tells us, "seems obvious and simple enough, but until the appearance of Dr. Longfield's lectures it was not thought of. With the exception of the discovery of the theory of rent-and, perhaps, even the propriety of this exception is questionable-no such important service has been rendered to the science since the days of Adam Smith." 3 When we reflect that the whole current of modern theory is setting in the direction indicated by Longfield and Butt, these encomiums do not appear to be altogether unmerited.

We stated at the outset of this chapter that the history of economics is yet to be written. The slight study that has been

3 Ibid., p. 32.

¹ Rent, Profits and Labour, p. 27. * Ibid., p. 23.

made of a period of less than two decades in the history of economic thought in a single country will, we trust, be found to be sufficiently rich in results to lead to a fuller investigation of the same period, as well as of other periods, both anterior and subsequent. British economists during the twenties and the thirties of the nineteenth century, far from presenting the dull level of uniformity and agreement which is usually associated with the name "classical school," abounds in writers, many of them of considerable ability, who did not scruple to attack the premises as well as many of the conclusions of the dominant sect, and who struck out for themselves new paths which have had to be rediscovered by modern thinkers. There are but few recent developments in economic doctrine of which we cannot find the forerunners in this early period. The historical and the ethical conceptions of economics; the emphasis laid on distribution, as well as on production; the opposition to the labour theory of exchange; the accentuation of time as an element in value; the roundabout-production theory of capital and the "agio" theory of interest; the broadening of the rent concept and the recognition of the weakness in the statement that rent does not enter into price; the distinction between the capitalist and the entrepreneur and the surplus theory of pure profits or business gains; and above all, the theory of marginal utility as the basis of value, and the marginal-productivity theories of wages and interestthese are but a few of the doctrines which we have seen advanced and elaborated by the authors of the period. With such a quartette as Bailey, Lloyd, Read and Longfield-not to mention the others—the so-called "minor" writers of England assume an importance which in some respects transcends that assigned to the "major" writers.

But, it will be asked, how does it happen that all these authors have been so largely overlooked and neglected? For very much the same reason, we answer, that Cournot was passed over in France and Gossen in Germany. Their views were not in accord with those of the dominant school. The practical issues of the time were so momentous that the economic science which taught a doctrine in harmony with these practical demands was accepted as infallible. The economists in England, indeed, were not responsible for free trade and industrial development. Those

would have come almost as quickly had economics never existed: for practical policies are the result for the most part of actual interests and not of abstract considerations. But when the demands of the dominant social and political classes were reinforced by the teachings of the scientists, economics leaped with a bound into the position not only of a popular, but almost of a sacrosanct, science. The edifice erected by Ricardo, and elaborated by McCulloch and Mill, became so solid and so stable that it could not be shaken by any current or gust of criticism or opposition. No one would listen to, very few would even read, publications which refrained from entering upon the field of practical discussion and were content to abide in the realm of theory. A theory that seemed to lead nowhere was not the kind of doctrine to which the practical age could be expected to lend a ready ear. Discouraged by their reception, most of these writers turned to other lines of activity, and before long their very existence was forgotten. The reputation of the great names was such that any deviation from accepted doctrines was branded as unorthodox. It was reserved for a later age to see the change in economic conditions which, first abroad and then in England, shattered the old idol of economic orthodoxy, and prepared the way for the newer thinkers who ventured to attack some of the practical conclusions, and not a few of the theoretical positions, of the dominant school. From these newer thinkers we must indeed not withhold our tribute of appreciation for their solidity and their originality; but we must likewise not begrudge a generous recognition to the predecessors, whose lot was cast in less fortunate times. When such recognition is accorded, it will be seen that Great Britain is the real mother, not only of classical political economy, but also of that series of newer ideas which is at the present time slowly transforming the face of economic science.

CHAPTER FOUR.

ECONOMICS IN THE UNITED STATES: AN HISTORICAL SKETCH.

[This chapter is a combination of the article "Economists" written for The Cambridge History of American Literature, vol. iv, New York, 1921, and of the article "Economic Science in the United States" written for the Jubilee volume (Festschrift) to commemorate Professor L. Brentano's eightieth birthday, 1925.]

Economics as a science is due to the analysis of the modern economic organization which was beginning to take shape in Great Britain at the time of Adam Smith, and in France at the time of the Physiocrats. In the United States the economic transition occurred much later. There, as in Europe, the formulation of systematic thought was preceded by a series of unsystematic discussions, and by a groping after true principles. These discussions were the outgrowth of dissatisfaction with existing conditions, and centred about definite practical problems. Moreover the discussion usually took the form of a pamphlet literature which often developed into a wordy warfare.

1. The Colonial Period.

In the pre-revolutionary period there were only a few economic topics that attracted any attention. These were agriculture, trade, taxation and currency, of which the most important, as well as the most contentious, was the last.

The literature of this subject is inadequate. Apart from a few special studies to be noted later, the only publications are: H. J. Furber, Geschichte und Kritische Studien zur Entwicklung der ökonomischen Theorien in Amerika, 1891; S. Sherwood, Tendencies in American Economic Thought, 1897; J. R. Turner, The Ricardian Rent Theory in Early American Economics, 1921; and the essays by C. F. Dunbar, "Economic Science in America, 1776-1876," in The North American Review, 1876, reprinted in his Economic Essays, 1904; and by T. E. Cliffe Leslie, "Political Economy in the United States," Fortnightly Review, v. 28, 1880, reprinted in his Essays in Political Economy, 1888. [Cf. also the article on the American School contributed by J. H. Hollander to the new edition of Palgrave's Dictionary.]

As in every primitive society, the currency problem involved the means of payment, public and private, and always loomed large in popular interest. Since it was almost impossible, for well-known reasons, to retain in the colonies an adequate circulation of coin, the gap was filled by the issue of paper money. Banking and currency problems, therefore, early engrossed the attention of colonial thinkers.

The only economic pamphlets of the seventeenth century that have been preserved, are Severals Relating to the Fund (1682), A Discussion and Explanation of the Bank of Credit (1687), and Some Considerations on the Bills of Credit now passing in New England (1691). These were anonymous Massachusetts publications of ephemeral merit. In the eighteenth century there were several well-defined periods of active discussion in Massachusetts, centring respectively about the years 1714, 1720, and 1740.1 Among the disputants were men like John Wise, Thomas Hutchinson, John Colman, Hugh Vance, and Richard Fryeclergymen, statesmen, business men and visionaries. Far and away the ablest was the learned physician, Dr. William Douglass (1692-1742), who wrote An Essay Concerning Silver and Paper more Especially with Regards to the British Colonies in New England (1738), as well as a Discourse concerning the Currencies of the British Plantations in America, Especially with Regard to Their Paper Money (1740).

The currency debate was not confined to Massachusetts. In 1729 there appeared in Philadelphia Benjamin Franklin's A Modest Inquiry into the Nature and Necessity of Paper Currency.² This was a well-reasoned defence of the government notes issued by Pennsylvania on land security, and in reference to which the distinguished author later wrote in his Autobiography: "My friends, who considered I had been of some service, thought fit to reward me by employing me in printing the money, a most profitable job, and a great help to me." In 1734 there was published in Charleston the first Southern tract on the subject, an Essay on Currency of some merit. This was followed in 1737 by

¹These pamphlets were reprinted in four volumes in 1911 by the Prince Society of Boston under the editorship of McFarland Davis.

³ In the following titles the name of the author when stated is printed as given; but when the work is anonymous, the author's name is here printed in the possessive case.

the Report of the Committee of the Commons House of Assembly of the Province of South Carolina on the State of the Paper Currency of the said Province, perhaps the ablest of all the colonial defences of government paper money. In 1737 a New York pamphlet appeared, under the title Scheme (by Striking 20,000 Pounds of Paper Money) to Encourage Raising of Hemp and the Manufacture of Iron in the Province of New York. This was followed in the ensuing decade by two tracts, Webbe's A Discourse Concerning Paper Money in which its Principles are Laid Open (Philadelphia, 1743) and the anonymous An Address to the Inhabitants of North Carolina on the Want of a Medium in Lieu of Money (Williamsburg, 1746).

With the prohibition, in 1751, of the emission in New England of any paper money, the discussion was transferred to coinage problems. Two Boston tracts of 1762 are to be noted: Hutchinson, A Projection for Regulating the Value of Gold and Silver Coins within the Province of Massachusetts Bay; and Oxenbrige Thatcher's Considerations on Lowering the Value of Gold Coins within the Province of Massachusetts Bay. An echo of the older discussion is found in Roger Sherman's A Caveat against Injustice or an Enquiry into the Evil Consequences of a Fluctuating Medium of Exchange, published at New York in 1752 under the name of Philoeunomos; in A Letter to the Common People of the Colony of Rhode Island Concerning the Unjust Designs . . . of a Number of Misers and Money Jobbers, by T. R. Cooper (Providence, 1763); and in the Letter from a Gentleman in Connecticut relative to Paper Currency (Boston, 1766). The ablest pamphlet of this period was Tench Francis's Considerations on a Paper Currency (Philadelphia, 1765).

While the currency question attracted the greatest attention, we find a few discussions of other problems. Among the publications worthy of mention are Proposals for Traffic and Commerce or Foreign Trade in New Jersey by "Amicus patriae" (Philadelphia, 1718); Observations on the Act for Granting an Excise on Wine (Boston, 1720); and the anonymous The Interest of the Country in laying Duties: or a Discourse shewing how Duties on some Sorts of Merchandize may make the Province of New York richer than it would be without them (New York, n. d. [1726]). To this two replies were published in the same year.

It was not until the middle of the century that we again find any discussion of taxation. The proposed introduction of an excise in Massachusetts led to a controversy, in which there are especially to be mentioned two works published at Boston in 1754: Some Observations on the Bill intitled An Act for Granting to His Majesty an Excise upon Wines and on Spirits Distilled; and The Good of the Community impartially considered, in a Letter to a Merchant in Boston, in answer to one received, respecting the Excise-Bill. By a True Friend to Liberty.

In the meantime had appeared the earliest literature dealing with the general problems of wealth.. The most important of these were Some Remedies Proposed for Restoring the Sunk Credit of the Province of Pennsylvania with Some Remarks on Its Trade (Philadelphia, 1721); and the same author's Ways and Means for the Inhabitants of Delaware to become Rich (Philadelphia, 1725); a reply to the same by James Logan, A Dialogue shewing What's Therein to be Found. A Motto being Modish for Want of good Latin, are put English Quotations (n. p. 1725); Cadwallader Colden, Papers relating to an Act of Assembly of the Province of New York, for Encouragement of the Indian Trade, etc., and for Prohibiting the Selling of Indian Goods to the French, viz. of Canada (New York, 1724); and above all Joseph Morgan, The Nature of Riches, shewed from the Natural Reasons of the Use and Effects thereof (Philadelphia, 1732).

The writings on agriculture, on the other hand, began a little later. The well-known clergyman, Jared Eliot, published his Essays upon Field Husbandry in New England as it is or may be Ordered, in six parts from 1748 to 1759 in New London, New York and New Haven. The interest engendered in the problem led to the publication of Extracts from the Essays of the Dublin Society Relating to the Culture and Manufacture of Flax (Annapolis, 1748) and to Charles Woodmaston's A Letter from a Gentleman from South Carolina on the Cultivation of Indico (Charleston, 1754). Worthy of note also is the beginning of the slavery discussion in A. Benezet, A Short Account of that Part of Africa inhabited by the Negroes . . . and the Manner by which the Slave Trade is carried on. (Philadelphia, 1762).

With the enactment of the Molasses Act of 1763 there ensued

a discussion of the economic aspects of the problem. Among the pamphlets, all published in 1764, and all except the last printed in Boston, the following deserve mention: Considerations upon the Act of Parliament whereby a Duty is Laid of 6d. Sterling per Gallon on Molasses, etc., shewing some of the many Inconveniences Necessarily Resulting from the Operation of the said Act; Oxenbridge Thatcher's The Sentiments of a British American: Reasons Against the Renewal of the Sugar Act as it will be Prejudicial to the Trade not only of the Northern Colonies but to those of Great Britain also; James Otis, The Rights of the British Colonies asserted and proved; and Thomas Fitch, Reasons why the British Colonies in America should not be Charged with Internal Taxes (New Haven, 1764), The controversy having now spread to the other colonies, led to several additional works which, although partly political in character, nevertheless took up in some detail the economic aspects of the problem. Among the most important of these were: Daniel Dulaney's Considerations on the Propriety of imposing Taxes in the British Colonies, etc. (North America, 1765); Jared Ingersoll, Letters relating to the Stamp Act (New Haven, 1766); The Examiners examined. Letter from a Gentleman in Connecticut (Ebenezer Devotion) to his Friend in London. An Answer to a Letter from a Gentleman in London to his Friend in America, etc. (New London, 1766); and John Dickinson's Letters from a Farmer in Pennsylvania to the Inhabitants of the British Colonies (Philadelphia, 1768). In fact, the only tract of this period not directly connected with taxation was The Commercial Conduct of the Province of New York Considered . . . in a Letter to the Society of Arts, Agriculture, and Economy (New York, 1767), which consisted of a plea to establish manufactures. With the imposition of the stamp taxes by the mother country in the following years there came a flood of controversial literature. This was, however, so overwhelmingly political in character as to call for no detailed comment here.

In the pre-revolutionary literature there stands out only one commanding name in American economic discussion, Benjamin Franklin.¹ His contributions represent the common-sense re-

¹ Cf. R. Hildebrand, Benjamin Franklin als Nationalökonom, Jena, 1863; and W. A. Wetzel, Benjamin Franklin as an Economist, Baltimore, 1895.

actions of a powerful mind to the problems of the day, reinforced later on by general reflections suggested by the Physiocrats and Adam Smith. In his first work on paper currency, referred to above, Franklin was influenced by Petty in selecting labour, rather than silver, as the best measure of value. In his Observations Concerning the Increase of Mankind (1751) he shows himself a forerunner of Malthus, and incidentally points out why wages must continue to be high in a country where there is an abundance of free land. In The Interest of Great Britain Considered with Regard to her Colonies and the Acquisition of Canada and Guadaloupe (1760) he emphasizes the principle of division of labour, and explains why manufacturing industry is difficult to introduce where the profits of agriculture are high. In On the Price of Corn and Management of the Poor (1767) he elucidates the reasons why export taxes are injurious and contends that "The best way to do good to the poor is not making them easy in poverty but leading or driving them out of it." In his Positions to be Examined Concerning National Wealth (1769) he gives partial adherence to the Physiocratic doctrine. In his Reflections on the Augmentation of Wages which will be occasioned in Europe by the American Revolution (1788) he develops the theory of the economy of high wages. Finally, in his Wail of a Protected Manufacturer (1789) he punctures some of the selfish arguments of a favoured class.

2. The Close of the Eighteenth Century.

With the outbreak of the Revolution a new chapter in economic discussion was initiated. The fiscal difficulties of the Revolution and the economic distress under the Confederation engendered much debate. Far and away the two ablest writers were Pelatiah Webster and Samuel Gale. Webster began in 1776, and continued for a decade, to expound, in consonance with the most modern principles, the currency evils of the time. These tracts were collected, with some additions, in a volume entitled Political Essays on the Nature and Operation of Money, Public Finances, and Other Subjects (Philadelphia, 1791). Gale, a native of South Carolina, published in three volumes several Essays on the Nature and Principles of Public Credit (1784-

1786), which have, moreover, the distinction of being the earliest effort to illustrate economic problems by mathematical symbols.

Other substantial contributions were made to economic discussion touching upon many topics. The subject that chiefly engrossed public attention during the lean years that followed the achievement of independence was the general trade depres-Apart from the writings of the statesmen like James Madison and Robert Morris, we may call attention to a number of general publications devoted to this problem: An Essay on the Causes of the Decline of Foreign Trade (Philadelphia, 1784): William Barton, The True Interest of the United States and particularly of Pennsylvania considered (Philadelphia, 1786); the vigorous pleas in favor of a drastic cut in the character and amount of imposts in The Commercial Conduct of the United States of America considered and the True Interest thereof attempted to be shewn by a Citizen of New York (New York, 1786); and the demand for a limitation of the West Indian trade to American-built ships in the anonymous Reflections on the Policy and Necessity of encouraging the Commerce of the Citizens of the United States (Richmond, 1786). Toward the close of the decade, the movement to follow political by industrial independence, which had already found expression in the beginnings of protective tariffs in the various states was now strengthened by a lively discussion. The first work to recount the advantages of manufacturing industry was Tench Coxe's An Enquiry into the Principles on which a Commercial System for the United States should be founded (Philadelphia, 1787). Coxe followed this by An Address to an Assembly of the Friends of American Manufactures (Philadelphia, 1787), in which he repeated the arguments and contended that "factories can be carried on by watermills, windmills, fire, horses and machines ingeniously contrived." As a result an association was formed which published The Plan of the Pennsylvania Society for the Encouragement of Manufactures and the Useful Arts (Philadelphia, 1787). The subject was further discussed in Observations on the Agriculture, Manufactures and Commerce of the United States, by a Citizen of the United States (New York, 1789).

In the meantime the financial situation had engendered much

² See above, p. 83, note 7.

doubt and acrimonious discussion. The problems of the separate states were treated in a number of contributions among which may be mentioned Benjamin Gale's Brief, Decent but Free Remarks and Observations on Several Laws passed by the Honorable Legislature of the State of Connecticut since the year 1775. By a Friend to his Country. (Hartford, 1782.) The condition of the public credit evoked a number of criticisms. among them the two Philadelphia publications of 1783: Letitia Cunningham, The Case of the Whias who loaned their Money on the Public Faith fairly stated; and the anonymous Three Letters addressed to the Public on: the Nature of a Federal Union, the Civil and Military Power, the Public Debt. These discussed among other points the revenue and currency situation, both of which now received further treatment. The first discussion of banking problems is found in the interesting Considerations on the Bank of North America, Philadelphia, 1785; followed by the first work of Mathew Carey who edited the Debates and Proceedings of the General Assembly of Pennsylvania on the Memorials praying a Repeal or Suspension of the Law annulling the Charter of the Bank (Philadelphia, 1786).

More general considerations are found in the work sometimes ascribed to Pelatiah Webster, but more probably written by John Witherspoon, Essay on Money as a Medium of Commerce with Remarks on the Advantages and Disadvantages of Paper admitted into General Circulation (Philadelphia, 1786). The same subject was further treated with considerable perspicacity by Aristides [G. A. C. Hanson], Remarks on the Proposed Plan of an Emission of Paper and on the Means of effecting it, addressed to the Citizens of Maryland (Annapolis, n. d. [1787]). The revenue difficulties gave rise to numerous projects for both state and confederate taxation, of which the most important were the advocacy of a house tax in Thoughts on Taxation in a Letter to a Friend . . . humbly submitted to the Good People of the State of New York (New York, 1784); the more elaborate defense of taxes on expenditure in James Swan's National Arithmetic or Observations on the Finance of the Commonwealth of Massachusetts (Boston, n. d. [1786]); and the demand for a federal tax in Honesty shewed to be True Policy or a General Impost considered and defended. By a Plain Politician (New

York, 1786). Attention may be called to the growing interest in agronomy, attested by American Husbandry, By an American (1775); followed by C. Varlo, A New System of Husbandry from many Years Experience [with an additional title of 26 lines] (Philadelphia, 1785). Finally there should be noted the beginning of statistical investigation, especially in Jedidiah Morse, The American Geographer (Elizabethtown, 1789).

With the adoption of the new Constitution the economic questions were put in the forefront of the battle and engaged the attention of the leading statesmen. Of these only a very few were pre-eminent as economic thinkers. Jefferson never pretended to grasp economic problems, his only contributions to the subject being found in his Notes on Virginia (1782), which disclose a striking incapacity to foretell the future industrial development of the country. Many years later Jefferson, as he tells us himself, "carefully revised and corrected" Destutt Tracy, A Treatise on Political Economy (Georgetown, D. C., 1817), which was translated from the unpublished French original. There is, however, no evidence that Jefferson profited from its perusal. On the other hand, Hamilton showed in his great state papers and notably in the two Reports on Public Credit (1790, 1795), the Report on the Bank, 1790, the Report on the Establishment of a Mint, 1791, the Report on Manufactures (1791), and various Reports on Taxation and on the Sinking Fund that he possessed a remarkable acquaintance with economic principles as then understood. There is in fact no statesman of the eighteenth century, with the exception of Turgot, who combined more successfully the perspicacity of a great leader of men with the ability to present powerful and sustained reasoning on economic problems. The only other American statesman who can remotely be compared to Hamilton is Gallatin, who even proved himself the superior of Hamilton as a technical financier. Gallatin's principal contribution to fiscal science was the proof, long before it was recognized by the British Hamilton, of the fallacy underlying the sinking fund. His contributions fall into three periods. In the first period there appeared A Sketch of the Finances of the United States (New York, 1796), followed by Views of the Public Debt, Receipts and Expenditures of the United States (Philadelphia, 1801). The

second period is marked by his important official papers, all published at Washington, notably the Report on the Subject of Public Roads and Canals (1808), the Report on the Subject of a National Bank (1809), and the Report on the Subject of American Manufactures (1810). In the third period his most significant contributions were Considerations on the Currency and Banking System of the United States (Philadelphia, 1831), the Memorial of the Committee of the Free Trade Convention (New York, 1831), and Suggestions on the Banks and Currency of the Several United States in reference principally to the Suspension of Specie Payments (New York, 1841). Worthy of note also at the close of the eighteenth century is Secretary Wolcott's Report on Direct Taxes (1796).

The last decade of the eighteenth century witnessed an increasing attention paid to commercial and financial questions. The outstanding writer of this period was Tench Coxe, commissioner of the revenue from 1792 to 1797. His earlier Enquiry and Address of 1787 have been mentioned above. In 1791 appeared his Brief Examination of Lord Sheffield's Observations on the Commerce of the United States (Philadelphia) designed to dissipate the gloomy predictions of the noble author. Three years later all of Coxe's papers and addresses were collected in A View of the United States of America in a Series of Papers written . . . between the Years 1787 and 1794 (Philadelphia, 1794). This was a comprehensive study, in over 500 pages, of the industrial possibilities of the country. He also wrote many official papers. Belonging to the subsequent decade are his Thoughts on Naval Power and the Encouragement of Commerce and Manufactures (1806); his Memoir on Cultivation, Trade and Manufacture of Cotton (1807); his treatise On the Navigation Act (1809); and, above all, the large quarto Statement of the Arts and Manufactures of the 1810 (Phila-United States of America for the year delphia, 1814). Among the other writers, the interest in the general discussion of trade is shown by the translation of Brissot de Warville and Étienne Clavière. The Commerce of America with Europe (New York, 1795), and by James Bowdoin, Opinions respecting the Commercial Intercourse between the United States of America and the Dominions of Great

Britain including Observations upon the Necessity and Importance of the American Navigation Act (Boston, 1797). Somewhat later occurred the heated controversy on Jay's treaty, in which a discussion of general principles will be found. Among the noteworthy publications are A Candid Examination of the Objections to the Treaty of Amity, Commerce, and Navigation, etc., by a Citizen of South Carolina (Charleston, 1795); Features of Mr. Jay's Treaty to which is annexed a View of the Commerce of the United States (Philadelphia, 1795); the Remarks on the Treaty of Amity, Navigation and Commerce, by a Citizen of the United States (Philadelphia, 1796); Robert Goodloe Harper, Address to his Constituents containing the Reason for approving of the Treaty (Boston, 1796); and what is in some respects the ablest of Alexander Hamilton's works, A Defence of the Treaty of Amity, Commerce and Navigation, under the pseudonym of Camillus (New York, 1795). A few of these and many others were printed in the three-volume work The American Remembrancer or an Impartial Collection of Essays, Resolves, Speeches, etc. relative, or having affinity, to the Treaty with Great Britain (Philadelphia, 1795).

Scarcely second to the general discussion of trade and commerce was that of finance. Of some influence was Governor James Sullivan's The Path to Riches. An Inquiry into the Origin and the Use of Money, by a Citizen of Massachusetts (Boston, 1792). Public credit was treated in Fallacy detected by the Evidence of Facts, and Considerations on the Impolicy and Injustice of a Compulsory Reduction of the Interest in the Public Debt (n. d., 1790); and The Shepherd's Contemplation, or an Essay on Ways and Means to pay the Public Debt (Philadelphia, 1794). The revenue problem, partly treated in the last essay, was further discussed by Dr. Laughan in his onslaught on "every species of indirect taxation" in Letter addressed to the Yeomanry of the United States shewing the Necessity of confining the Public Revenue to a Fixed Proportion of the Net Produce of the Land. By a Farmer (Philadelphia, 1791); and by Philip Schuyler, Remarks on the Revenue of the State of New York (Albany, 1796). The opposition between the economic principles of Hamilton and Jefferson, representing respectively the industrial and the agricultural interests, which

were soon to crystallize into the political conflict of the Federalists and the Republicans received an interesting literary expression, in John Taylor's An Examination of the Late Proceedings in Congress respecting the Official Conduct of the Secretary of the Treasury (Philadelphia, 1793). In this he attacked the public-debt policy; following it with An Enquiry into the Principles and Tendency of Certain Public Measures (Philadelphia, 1794), in which he criticized the bank as an engine of aristocracy. Scarcely second to Taylor were the writings of J. T. Callender, Sedgwick & Co., or a Key to the Six per cent Cabinet (Philadelphia, 1798); The Prospect before Us (Richmond, 1800-1801); and the Letters to Alexander Hamilton, King of the Feds, etc. (New York, 1801-2). Of a like character was the earlier work of William Findley, Review of the Revenue Legislation adopted by the First Congress (Philadelphia, 1794).

Opposition to the movement designed to favour industry was voiced by George Logan's Five Letters addressed to the Yeomanry of the United States, containing some Observations on the dangerous scheme of Governor Duer and Mr. Secretary Hamilton to establish National Manufactures. By a Farmer (Philadelphia, 1792). In fact the interest taken in agriculture now seemed to be paramount. There appeared in rapid succession Samuel Deane, The New England Farmer or Georgical Dictionary (Worcester, 1790); J. B. Bordley, Sketches on Rotations of Crops and other Rural Matters (Philadelphia, 1792); his later Essays and Notes in Husbandry (Philadelphia, 1799); and John Spurrier, The Practical Farmer (Wilmington, 1793). The question of the Western lands and land titles received much attention, among the chief contributions being Observations on the North American Land Company lately instituted in Philadelphia (1796) with an introduction by Robert Morris; John Rutherford's Cautionary Hints to Congress respecting the Sale of the Western Lands (Philadelphia, 1796); Barnabas Bidwell's The Susquehannah Title stated and examined (Catskill, 1796); and Abraham Bishop, Georgia Speculation Unveiled (Hartford, 1797-8). Deserving of mention also is An Historical Account of the Rise. Progress and Present State of the Canal Navigation

⁸ Some of this literature is discussed by my former student, C. A. Beard, Economic Origins of Jeffersonian Democracy, 1915.

in Pennsylvania (Philadelphia, 1795). Finally, the general interest in economic discussion is shown by the edition of Godwin, Enquiry concerning Political Justice (Philadelphia, 1796).

3. The Nineteenth Century to the Civil War.

The first quarter of the nineteenth century saw but little change in the general character of economic discussion. The United States continued to be overwhelmingly agricultural in character and it was only toward the end of this period that New England was beginning to be affected by the industrial transition which was responsible for the rapid growth of economic science in Great Britain. The Wealth of Nations, of which the first American edition had appeared in 1789, was now reprinted in 1811 and 1818; Malthus, Essay on Population appeared in an American edition in 1809; Ricardo, Principles of Political Economy and Taxation in 1819, and Mrs. Marcet, Conversations on Political Economy in 1817. J. B. Say, Treatise on Political Economy was translated in 1821; and a second edition with notes by C. C. Biddle appeared in 1824.

The first American work with an independent title was An Essay on the Principles of Political Economy (1805), a rather insignificant treatise on banking and public revenue. Not much more important were L. Baldwin, Thoughts on the Study of Political Economy as Connected with the Population, Industry, and Paper Currency of the United States (Cambridge, 1809); and A. V. Johnson, Inquiry into the Nature of Value and Capital (New York, 1813). More significant was Daniel Raymond, Thoughts on Political Economy (1820) which disclosed an acquaintance with the English writers and of which there appeared three years later a second edition with the title The Elements of Political Economy. The author was opposed to slavery, to banks, and to free trade, and laid the foundations for the defence of the protective system.1 It was from Raymond that Friedrich List derived his theory of nationalism, just as it was from the experience of the United States, as disclosed during his American stay, that List deduced his conclusions on railroads and on the customs union, which he later developed with

² Cf. C. P. Neill, Daniel Raymond, an Early Chapter in the Economic Theory in the United States, Baltimore, 1897.

such vigour on his return to his own country. Raymond, however, employed but few arguments that are not already found in Hamilton's report on manufactures; so that Hamilton may well be called the spiritual father of Friedrich List. A similar critical attitude to the teachings of the classical school is visible in A. H. Everett, New Ideas on Population: with Remarks on the Theories of Malthus and Godwin (London, 1823), in which the optimistic attitude of youthful America is revealed; and in Willard Phillips, Manual of Political Economy, 1828, who also opposes Ricardo's theory of rent and defends protection.

The chief lines of discussion were largely a continuation of the preceding period. The interest temporarily manifested in industry is attested by George Logan's A Letter to the Citizens of Pennsylvania on the Necessity of Promoting Agriculture, Manufactures and the Useful Arts (1800) and an Essay on the Manufacturing Interests of the United States (Philadelphia, 1804). The commercial disputes with Great Britain and France led to an acrimonious literature, which was, however, so largely political in value that it will be passed over here. Agricultural problems were treated by Thomas Moore in The Great Error of American Agriculture Exposed (Baltimore, 1801); James Humphrey, Gleanings on Husbandry (Philadelphia, 1803); John Roberts, The Pennsylvania Farmer (Philadelphia, 1804); and, above all, by Colonel John Taylor's Arator (Georgetown, 1814) and his two voluminous works An Inquiry into the Principles and Policy of the Government of the United States (Fredericksburg, 1814) and Tyranny Unmasked (Washington, 1822), in which he sounded the praises of agriculture and opposed the industrial system with its protective duties. We may also mention J. S. Skinner, The American Farmer (Baltimore, 1820).

A growing interest was now taken in statistical presentation. Worthy of notice are the works by S. Blodgett, Jr., Thoughts on the Increasing Wealth and Natural Economy of the United States (1801), Facts and Arguments respecting the Great Utility of an Extensive Plan of Inland Navigation in America (Philadelphia, 1805), and Economica (1806); Timothy Dwight, Statistical Account of Connecticut (1811); R. Dickinson, A Geographical and Statistical Review of Massachusetts (1813); and Moses Greenleaf, Statistical View of Maine (1816). Widely read were

Adam Seybert, Statistical Annals (1818), D. B. Warden, Statistical Political and Historical Account of the United States (3 vols., 1819), John Bristed, Resources of the United States (1818). and William Darby, Universal Gazetteer (1827) and View of the United States, Historical, Geographical, and Statistical (1828). We may also mention three works on the banking question: Henry Banks, Sketches and Propositions recommending the Establishment of an Independent System of Banking, etc. (Richmond, n. d. [1804]); Dr. Erick Bollman, Paragraphs on Banks (Philadelphia, 1810); and the Letters of Common Sense Respecting the State Bank and Paper Currency (Raleigh, 1811). Above all, attention must be directed to the various official papers of the Philadelphia lawyer, Alexander J. Dallas, who extricated the country from the fiscal chaos of the War of 1812 and who was, with the exception of Hamilton and Gallatin, the ablest of the American Secretaries of the Treasury.

There is only one author of prominence during this period and he was in many respects an amateur economist whose chief reputation was earned in other fields. Mathew Carey (1760-1839), of Philadelphia, devoted such leisure as he could take from his publishing business to a consideration of economic questions. In the earlier period he was interested in banking topics, as is shown by his Memorials Praying a Repeal or Suspension of the Law annulling the Charter of the Bank (1786), his Letters to Adam Seubert on the Bank (1811) and his Essays on Banking (1814). A little later he issued The Olive Branch (1814), devoted to some of the economic and political questions growing out of the war, which rapidly ran through many editions. Beginning in the twenties, however, he devoted most of his efforts to a defence of the protective system, as is evidenced by his Essays on Political Economy (1822), An Appeal to Common Sense (1823), The Crisis (1823), The Political Economist (1824), Prospects on and beyond the Rubicon (1830), An Appeal to the Wealthy of the Land (1836) and a multitude of shorter works, over one hundred in number. Carey was primarily a controversial pamphleteer, and his contributions, although exerting considerable influence at the time, were not of lasting note.

The second and third quarters of the nineteenth century were marked by two significant facts. The industrial transition

in the East, together with the immigration to the West and South, brought into political discussion four economic problems: the labour question, the land question, the money question, and the free trade controversy. Each of these gave rise to a vast pamphlet literature. The other important fact is the emergence of some interest in political economy as a science and the institution of college chairs devoted to the subject.

Taking up first the general economic discussion, two outstanding names deserve attention. The Rev. John McVickar 1 (1787-1868) occupied from 1817 at Columbia College the chair of moral philosophy and political economy. To Columbia may therefore be credited the distinction of having the first professorship of political economy in the United States.2 It is for this reason that the chair occupied by the present writer at Columbia is called the McVickar Professorship of Political Economy. Having already made a contribution to the banking system in New York under the pseudonym of Junius, McVickar published, in 1825, his Outlines of Political Economy, a reprint of McCulloch's article in the Encyclopedia Britannica, but with what is described on the title page as Notes Explanatory and Critical and a Summary of the Science. A little later McVickar edited Mc-Culloch's Encyclopedia article as Interest made Equity, 1826, and wrote an excellent anonymous work, Hints on Banking, in a Letter to a Gentleman in Albany, by a New Yorker, 1827. In the next decade he published First Lessons in Political Economy for the use of Primary and Common Schools, 1835. The other outstanding writer is Thomas Cooper (1759-1840) president of South Carolina College at Columbia, and from 1824 professor of chemistry and political economy. Having previously (1823) written Two Tracts on the Proposed Alteration of the Tariff, he published in 1826 his Lectures on the Elements of Political Economy, which ran through several editions and which devoted some attention to the views of the contemporary socialists in New York. Cooper followed this by a Manual of Political Economy (1834). Neither McVickar nor Cooper departed materially from the position of the nascent political economy in England.

¹ Cf. Wm. McVickar, Life of Rev. John McVickar, New York, 1872.

² Political Economy had, however, been included in the course of instruction in William and Mary College before it was taught in Columbia.

A keener writer was the Southern editor, J. N. Cardozo, whose Notes on Political Economy (1826) disclosed a vigorous opposition to the Ricardian law of rent and the Malthusian law of population, but whose book, like that of Cooper, culminated in a defence of free trade. On the other hand, Willard Phillips, the admirer and editor of Benjamin Franklin, wrote a Manual of Political Economy, 1828, which is a thoughtful acceptance, with some limitations, of the conclusions of the classical school, and which contains the earliest American proposal to introduce the composite standard of value suggested by Evelyn in 1798 and subsequently elaborated by Lowe. In his later Propositions concerning Free Trade and Protection, 1850, Phillips reversed his conclusion as to protection, and had no words too severe for the free traders. The salient passage is worth quoting:

Being then (some 30 years ago) imbued with that economical creed which is taught in the public seminaries, I had occasion to attempt its vindication . . .; and I had the good fortune or misfortune, on investigating the subject anew to convert myself to the opinions I had undertaken to combat. I came out with the thorough conviction that the science which seemed as luminous to those at the feet of the Gamaliels, consisted very much of groundless postulates and sophistry. I could not divest myself wholly of a feeling of resentment at having been imposed upon.

He speaks later of the "apostles of the 'science'—the class of dreamy, transcendental obstructionists, devotees to a single idea, who have soared to some empyrean height, where they have lost sight of this world, or are so far from it that they cannot distinguish their own country from another."

The only other contributions of the decade were an Outline of Political Economy 1828) by William Jennison; the Lectures on the Restrictive System, delivered to the Senior class of William and Mary College (1829) by Thomas R. Dew, who was the first economist to defend slavery; and a work with the remarkable title: A Treatise on Political Economy, or the true Principle of Political Economy in the Form of a Romaunt, for the more pleasing aecommodation of Readers explained in a Series of Letters to Aristippus from Aristander; perceived in a vision. The subject is

¹ Propositions concerning Free Trade, etc., p. 110.

presumed to be considered upon strict Philosophical, Mathematical and Geometrical Principles. (Baltimore, 1824.)

The next decade showed more activity. Beginning with the fugitive writings of William Beach Lawrence, Two Lectures on Political Economy (1832); W. H. Hale, Useful Knowledge for the Producers of Wealth (1833); and An Essay on the Principles of Political Economy Designed as a Manual for Practical Men by an American (1837), we come to more formal works: S. P. Newman [who lectured on political economy at Bowdoin College from 1824], Elements of Political Economy (1835); Theodore Sedgwick, Public and Private Economy, in three parts (1836-39); and Francis Wayland [who began lecturing on political economy at Brown in 1828], Elements of Political Economy (1837), which remained the most popular general manual of political economy for several decades. Based very largely on Wayland was Marcius Wilson, Civil Polity and Political Economy (1838). More decidedly under the influence of the British school, and especially of McCulloch, an American edition of whose Dictionary of Commerce he issued, was H. Vethake who, after publishing several Introductory Lectures on Political Economy in 1831 and 1833. issued his Principles of Political Economy (1838), containing the substance of the courses given since 1821 at Dickinson College. and later at Princeton. In the next decade he published Correspondence with Alexander H. Everett on Political Economy Of considerably more independence and vigour of thought was George Tucker, who had begun in 1826 to lecture at the University of Virginia, and who had already written Essays on Various Subjects of Taste, Morals and National Policy (1822). He published in 1837 The Laws of Wages, Profits, and Rent Investigated; and subsequently issued The Theory of Money and Banks Investigated (1839); the Progress of the United States in Population and Wealth in Fifty Years (1843); and after another interval, Banks or no Banks (1857); and Political Economy for the People (1859). Worthy of notice also is the work by the engineer Charles Ellet, Jr., An Essay on the Laws of Trade in Reservence to the Works of Internal Improvement (1839).

The only book of this period which manifested great originality was the Canadian John Rae, Statement of New Principles on the Subject of Political Economy (Boston, 1834). He made a dis-

tinct contribution to the theory of capital and he laid a more solid foundation for the defence of the protective system. Rae is the only American writer of this period who attracted the notice of John Stuart Mill.

During the forties the interest in political economy seemed to slacken. Only five books are to be recorded: Professor A. Potter, Political Economy, Its Objects, Uses and Principles (1840), which was largely an adaptation of Poulett Scrope; G. Vale, Manual of Political Economy (1841); the Notes on Political Economy (1844) by "a Southern planter" [N. A. Ware] who oddly enough defended the protective policy; E. C. Seaman, Essays on the Progress of Nations in Productive Industry, Civilization, and Wealth (1846); and Calvin Colton, Public Economy for the United States (1848), a rather intemperate plea for protection. Much the same is true of the fifties, with the publication of G. Opdyke, A Treatise on Political Economy (1851).

There now appeared, however, four text books which enjoyed a wide circulation. Francis Bowen, Professor of Moral Philosophy at Harvard, published The Principles of Political Economy Applied to the Condition, the Resources, and the Institutions of the American People (1856). In later editions the name was changed to American Political Economy. He explains how and why he came to oppose the doctrines "of Adam Smith on free trade, of Malthus on population, of Ricardo upon rents and profits, of Torrens and Lloyd upon the currency, and of McCulloch upon the laws of inheritance." Less interested in practical application and accepting more uncritically the reasoning and the conclusions of the classical school was John Bascom, of Williams College, who wrote a Political Economy Designed as a Text Book for Colleges (1859). Quite to the contrary, Amasa Walker, of Amherst College, approached the subject from the point of view of a business man, and wrote The Science of Wealth. A Manual of Political Economy Embracing the Laws of Trade, Currency and Finance (1866), differing from Bowen in accepting Free Trade and the doctrines of the Currency School. He was, however, sufficiently influenced by American conditions to be severely critical of Malthus. The most widely read text book was A. L. Perry, of Williams College, The Elements of Political Economy (1865), of which twenty-one editions had appeared by the time he

published his subsequent Principles of Political Economy (1890). His general position and scientific equipment may be inferred from his statement in the preface to a later edition: "I had scarcely read a dozen pages in Bastiat's Harmonies of Political Economy when the field of the science in all its outlines and landmarks lay before my mind just as it is to-day." He also tells us that "most of what is original in my book is a result of absolutely dropping the word worth." Less important were E. Lawton, Lectures on Science, Politics, Morals, and Society (1862); and President J. T. Champlin, Lessons on Political Economy (1868).

All of these writers were cast into the shade by the one American author who soon acquired an international reputation. Henry C. Carey (1793-1879), the son of Mathew Carey, was well in the forties before he commenced to write. Beginning in 1835 with his Essay on the Rate of Wages Carey published in rapid succession a flood of pamphlets as well as a series of volumes. Chief among the latter are the Principles of Political Economy (3 vols., 1837-40); The Past, the Present, the Future (1848); The Harmony of Interests (1850); The Slave Trade (1853); Principles of Social Science (3 vols., 1858-59); and The Unity of Law (1872).1 Carey started out as a free trader, but soon became an ardent protectionist and took issue at almost every point with the doctrines of the classical school. He opposed Adam Smith on the theory of productive labour; he objected to the Ricardian theories of rent and wages; he criticized the Malthusian theory of population; he laid stress on his own law of value and utility; and he elaborated, on original but none the less insecure foundations, a whole structure of economic thought. At a time when the field was occupied by the American imitators of British classical political economy and by the widely read translations of Bastiat, the French free trader, Carey heartened all those both at home and abroad who were seeking some economic basis for the newer nationalism with its policy of protection. Great as was the influence that he exercised at the time, later generations have found but little of enduring

² Cf. J. W. Jenks, Henry C. Carey, als Nationalokonom, Jena, 1885; A. Adler, Ricardo und Carey in ihren Ansichten über die Grundrente, 1873; and C. H. Levermore, "Carey and his Social System," Political Science Quarterly, vol. v. (1890).

value in his contributions to economic science; and toward the end of his career he weakened his influence by espousing the inflationist currency arguments. At the time, however, Carey formed a school which counted among its adherents thinkers like Dühring in Germany and Ferrara in Italy, and which included at home several Pennsylvania publicists: William Elder, who wrote Questions of the Day, Economic and Social (1871), and Conversations on the Principal Subjects of Political Economy (1882); E. Peshine Smith, A Manual of Political Economy (1873); Henry Carey Baird, Political Economy (1875); and Robert Ellis Thompson, Social Science and National Economy (1875) as well as several other works on protection. Belonging in part to the same school is Stephen Colwell, A Preliminary Essay to the Translation of List's National System of Political Economy (1856), with a good historical sketch of the science, in which he declared his variance at some points from Carev. Colwell also wrote Ways and Means of Payment: a Full Analysis of the Credit System (1859).

Side by side with this development of the general theory of economics, there proceeded, as mentioned above, a heated discussion on practical economic problems. Most of this pamphlet literature, interesting as showing the current of popular thought, must be passed over in this brief sketch. In a fuller history of American economics not a few of these publications will be found deserving of mention. Among the more elaborate works several are to be noted. In the workingman's movement which developed in the third decade in New York, three authors exerted more than a passing influence. L. Byllesby, Observations on the Source and Effects of Unequal Wealth (1826) and Thomas Skidmore, The Rights of Man to Property (1829) furnished the basis for the new and short-lived socialist movement. Frances Wright, the eloquent and attractive apostle of freedom for women and negroes, exerted a great influence by her Course of Popular Lectures (1829) and by The New Harmony Gazette (1825-35) which she edited in co-operation with Robert Dale Owen, a son of Robert Owen.¹ Interesting discussions of the principles of the labour movement are found in The

¹Cf. W. R. Wakeman, Frances Wright in the Columbia University Studies in History, Economics and Public Law, 1924.

Journeyman Mechanic's Advocate (1827), the first labour paper in the world; The Mechanics' Free Press (1828-1831); and The Workingman's Advocate, edited by G. H. Evans (1829-36).

For the next few years the interest in the question was maintained by William Maclure, Opinions on Various Subjects Dedicated to the Industrious Producers (1831); Stephen Simpson, Workingman's Manual, a New Theory of Political Economy (1831); and Seth Luther, An Address to the Workingmen of New England (1833), as well as by the labour periodicals such as The Man (1834-35), The National Laborer (1836-37), Thomas Brothers' The Radical Reformer (1836), and Ely Moore's The National Trades-Union (1836-37).

The labour movement was succeeded in the forties by a wave of Fourierism and Associationism. The chief advocate of this was Albert Brisbane, with his Social Destiny of Man (1840), Association (1843), various translations of Fourier, and The Phalanx; or Journal of Social Science (1843-5). He was followed by Parke Godwin in his Popular View of the Doctrines of Fourier (1844) and by Horace Greeley in Association Discussed (1847). Greeley, who for a time opened the influential columns of the Tribune to this movement, showed his interest in the general subject by writing an introduction to Atkinson's Principles of Political Economy (1843). He soon became more interested in the problems of protection and free land, editing in 1843, The American Laborer and publishing toward the end of his career the Essays Designed to Elucidate the Science of Political Economy (1869), devoted to the same topics.

The interest in the Communist movement was carried on in The Harbinger (1845-47), of the Brook Farm phalanx; J. M. Horner's The Herald of the New-Found World (1841-42); The Communist (1844); and J. A. Collins' The Social Pioneer (1844). The general theories of the labour movement are reflected in Robert McFarlane's Mechanics' Mirror (1846). This period is also marked by the advent of three original thinkers who emphasized individualism to the very extreme of anarchism: Josiah Warren, Equitable Commerce (1846) and True Civilization (1846); Stephen Pearl Andrews, The True Constitution of Government in the Sovereignty of the Individual (1851) and Cost the Limit of Price (1851); and Lysander

Spooner, Poverty: Its Alleged Causes and Legal Cure (1846). Less important were J. Pickering, The Workingman's Political Economy (1847); J. Campbell, A Theory of Equality (1848); and E. Kellogg, Labor and Other Capital (1849). The next decade, with its period of prosperity, is marked by only two noteworthy books: Adin Ballou, Practical Christian Socialism (1854) and H. Hughes, Treatise on Sociology (1854).

The tariff controversics elicited but few works of importance. In the earlier period, in the contest centring around the Bill of Abominations of 1828 and its immediate successors, we have to note, in addition to the works of Lee, Gallatin and Dew referred to above, Hezekiah Niles, Journal of the Meeting of the Friends of Domestic Industry (1831). Perhaps the most outstanding figure of this period was Condy Raguet, author of The Principles of Free Trade (1835) and editor of The Examiner and Journal of Political Economy (1834-35). In the later period we need mention only W. M. Grosvenor, Does Protection Protect? (1871) and the numerous publications of E. B. Bigelow.

Much the same may be said about the controversies on the currency, which produced only a few works of more than passing interest. Worthy of mention are E. Lord, Principles of Currency and Banking (1829); W. M. Gouge, A Short History of Paper Money and Banking (1833) and The Fiscal History of Texas (1852); R. Hildreth, Banks, Banking, and Paper Currencies (1840); and C. Duncombe, Free Banking, an Essay on Banking, Currency, Finance, Exchange and Political Economy (1841). A Citizen of Ohio [William Beck] was responsible for Money and Banking or Their Nature and Effects Considered (1839), containing the earliest American proposal for the ticket exchange. In the later period we may call attention to J. A. Ferris, The Financial Economy of the United States (1867).

This period is also marked by a more systematic study of statistics as evidenced by A. Russell, Principles of Statistical Inquiry (1839), G. Tucker, Progress of the United States (1843), and J. D. B. De Bow [the superintendent of the Seventh Census, who lectured on political economy at the University of Louisiana from 1849], The Industrial Resources of the Southern and Western States (1846-1869). In 1839, moreover, was founded the American Statistical Association, whose first secretary, J. B. Felt wrote

on population and finance; while the subject of vital statistics was cultivated by L. Shattuck and by Dr. Edward Jarvis, for thirty-one years the president of the Association.

4. The Post-Bellum Decade.

With the end of the Civil War the change in prices brought a renewed interest in the labour question. The two national periodicals were Fincher's Trades Review (Philadelphia) and The Workingmen's Advocate (Chicago). The philosophy of the labour agitation was expounded by Ira Steward in The Eight Hour Movement (1865) and Poverty (1873); by William Dealtry in The Laborer (1869); and by E. H. Haywood in Yours and Mine (1869); while the communist movement was best represented by Alexander Longley in The Communist (1868-79). During the early seventies there are to be noted H. B. Wright, Practical Treatise on Labor (1871); W. Brown, The Labor Question (1872); W. B. Greene, Socialistic, Communistic, Mutualistic, and Financial Fragments (1875); and L. Masquerier, Sociology or The Reconstruction of Society (1877).

The chief problems, however, were naturally the fiscal situation, the debt, the burden of taxation and the currency. Amid the mass of writers, most of whom contributed to the rather heated pamphlet literature, only a few authors of outstanding merit are to be discerned.

David A. Wells (1828-98) was a chemist who had sprung into prominence by a pamphlet Our Burden and Our Strength (1864), which contributed not a little to increase the confidence of the North in ultimate victory. He now addressed himself to fiscal problems and became the special commissioner on internal revenue. Having been converted from protectionism to free trade, he issued in rapid succession a number of important books and official reports. Among the former we may mention The Relation of the Government to the Telegraph (1873), Robinson Crusoe's Money (1876), Practical Economics (1885), Recent Economic Changes (1890) and The Theory and Practice of Taxation (1900). Wells had a remarkable faculty for marshalling economic facts and exerted a great influence on public opinion and legislation. But he was far

stronger in explaining facts than in elucidating economic principles: and his extreme advocacy of individualism and free trade, together with a lack of acquaintance with the history of economic literature, conspired to limit his influence within narrow circles. Much the same may be said of Edward Atkinson (1827-1905), whose chief contributions were a Report on the Cotton Manufacture (1863), Revenue Reform (1871), The Distribution of Products (1885), The Margin of Profits (1887), and The Industrial Progress of the Nation (1890), together with innumerable pamphlets. Belonging to the same group was Horace White, who specialized on the currency problem in The Silver Question (1876) and Money and Banking (1895); as well as J. Schoenhof, who wrote The Destructive Influence of the Tariff (1883), A History of Money and Prices (1885), and The Economy of High Wages (1893). Somewhat more academic were Professor W. G. Sumner (1840-1910), with his Lectures on the History of Protection (1877), A History of American Currency (1878), Problems in Political Economy (1885), and What Social Classes Owe to Each Other (1883); and Professor C. F. Dunbar, Chapters on the Theory and History of Banking (1891), and the posthumous Economic Essays (1904). A more original mind was the astronomer Simon Newcomb (1835-1919), who after devoting some attention to financial policy made his chief contribution in Principles of Political Economy (1886). Worthy of mention as writers on money are S. Dana Horton, Silver and Gold (1876), The Monetary Situation (1878), and The Silver Pound (1887); John J. Knox. United States Notes (1884); A. Del Mar, A History of the Precious Metals (1880), and Money and Civilization (1886); and C. A. Conant, A History of Modern Banks of Issue (1886), and The Principles of Money and Banking (1905).

Far and away the most prominent figure of the period is Francis A. Walker (1840-97), who was the first lecturer on economics at Johns Hopkins in 1876. Although not acquainted with much of the recent Continental literature in economics, General Walker possessed a powerful intellect and was so hospitable to the newer ideas that he lent his weighty support to the efforts of the younger men to put economic study on a scientific basis. He became the first president of the American Economic Association and during his several years' incumbency

of office did much to strengthen the influence of that organization which has played a notable part in the history of American economics. His chief works, each marked by vigour and independence of thought, are The Wages Question (1876), Money (1878), Land and its Rent (1881), Political Economy (1883), International Bimetallism (1896), and Discussions in Economics and Statistics (1899). Walker helped to give the coup de grâce to the wages-fund doctrine, and his theory of distribution has come to be known as the residual theory. Not only did he exert a great influence on economic thought, but his contributions to statistics as Superintendent of the Ninth and Tenth Census were scarcely less pronounced.

Another important milestone in the progress of economic thought is marked by Henry George (1839-97). George, living in California at a time when everything seemed to point to the rapid growth of bonanza farms, came to the conclusion that the solution of the modern social problem lay in the nationalization of land, through the medium of the single tax. Beginning with Our Land and Land Policy (1871), he elaborated his general theory in Progress and Poverty (1879), which ran through countless editions. The same ideas with further applications were repeated in Social Problems (1884), Protection or Free Trade (1891), A Perplexed Philosopher (1892), and The Science of Political Economy (1898). In all other respects an extreme individualist, Henry George carried to its logical extreme John Stuart Mill's theory of the unearned increment. One-sided as his doctrine has come to be considered, he contributed two important points to the progress of economic thought in the United States. The one was his theory of privilege-even though he was extreme in limiting this to land; the other was the theory that wages are fixed by the product of rentless land, a doctrine which started the thinking of Professor Clark.

5. The Modern Schools of Economic Thought.

The last quarter of the nineteenth century witnessed a marked change in economic conditions. The two fundamental facts were the industrial transition with the advent of modern capitalism, which completely transformed the East and which was fast spreading inland; and, on the other hand, the gradual disappearance of the free lands in the West. These facts were responsible for the emergence of the labour problem in its modern setting. Moreover, the rapid growth of the railway system brought that subject to the front, and the fall in prices coupled with the growing pressure of taxation attracted attention to the silver problem and the general fiscal situation. In short, the United States now reached its own as a more or less fully developed modern economic community and was confronted by a multiplicity of difficult economic questions. The great strike of 1877 sounded the first note of the newer and modern campaign. Almost simultaneously a number of young and enthusiastic scholars went abroad to seek on the Continent an economic training which could at that time not be obtained at home. It was these younger men who on their return in the early eighties were called to the new chairs of political economy in the various colleges and universities, and through their teachings founded the modern scientific study of economics in the United States.

In 1885 these younger men, together with a few older sympathizers formed at Saratoga, the American Economic Association. The younger men were R. T. Ely, J. B. Clark, H. C. Adams, S. N. Patten, F. H. Giddings, E. J. James, D. R. Dewey, H. Tuttle, E. W. Bemis, B. Andrews and the present writer; the older men included Andrew T. White, C. K. Adams, Washington Gladden and Eugene Schuyler. The influence of their European training is visible in the statement of principles adopted at the Saratoga meeting:

1. We regard the state as an agency whose positive assistance is one of the indispensable conditions of human progress.

2. We believe that political economy as a science is still in an early stage of its development. While we appreciate the work of former economists, we look not so much to speculation as to historical and statistical study of actual conditions of economic life for the satisfactory accomplishment of that development.

3. We hold that the conflict of labor and capital has brought into prominence a vast number of social problems whose solution requires the united effort, each in its own sphere, of the church,

of the state, and of science.

4. In the study of the industrial and commercial policy of

governments we take no partisan attitude. We believe in a progressive development of economic conditions, which must be met by a corresponding development of legislative policy.

To the foregoing was attached a footnote:

This statement was proposed and accepted as a general indication of the views and the purposes of those who founded the American Economic Association, but is not to be regarded as binding upon individual members.

The American Economic Association had, however, scarcely been founded, when attention was called to the dangers of the extreme development of the German *Historismus*. As a result, in the course of a few years, the Association which had really been entirely catholic from the beginning, dropped its statement of principles, especially as not a few of the members who had returned from Europe were now devoting themselves more specifically to problems of economic theory; and the Association became, what it has since remained, a general meeting place for scientific students of all shades of opinion, whether interested in pure theory, in history or in the practical problems of economic life.

The American Economic Association began its series of publications in 1886 with a monograph on The Relation of the Modern Municipality to the Gas Supply, by Edmund J. James, of the University of Pennsylvania. Professor James, however, soon transferred his interests from the field of economics to that of university administration. In the meantime appeared the first fruits of the literary labours of the group as a whole, in a composite volume entitled Science Economic Discussion, soon followed by a similar volume on The National Revenues, edited by Albert Shaw. The same year witnessed the inception of two scientific periodicals, the Political Science Quarterly edited by the Faculty of Political Science of Columbia and, half a year later, the Quarterly Journal of Economics, edited at Harvard.

In the first group of these younger economists are to be mentioned three who have since passed away. Of these perhaps the ablest was Henry C. Adams, who was first called to Cornell, and then became identified with Michigan University. Adam's earliest contribution was a remarkable study on the *Relation of the*

State to Industrial Action (1886), in which he took issue with the laissez faire theory and emphasized the rôle of government in its effort to raise the level of competition. His chief constructive work, however, was in the field of public finance and transportation. In 1887 appeared his Public Debts, which at once became a classic on the subject; and a decade later he published The Science of Finance (1898), the first of its kind in the English language. This was characterized by profound thinking and by the effort to apply general principles to American conditions. In the field of transportation he was called by the Interstate Commerce Commission, shortly after its creation in 1887, to become its general statistician; and for the remainder of his life he devoted his chief energies to elaborating a system of statistical reports and to the endeavour to secure their adoption by the leading railway systems of the United States. He was later on called to China to do similar work there for the government railway systems. During all these years Adams continued to occupy his chair at Michigan, and devoted especial attention to the social and ethical aspects of economics and the theory of distribution.1

Simon N. Patten, one of Conrad's students, was in many respects the most original of American economists. He was not only a prolific and suggestive writer, but an admirable teacher, and in his chair of economics at the University of Pennsylvania inspired perhaps more of the younger scholars in the United States than any other single individual. Patten worked on the border line between economics and sociology, devoting especial attention to the doctrine of consumption in The Theory of Dynamic Economics (1892); The Theory of Prosperity (1902); and The New Basis of Civilization (1907). He also made notable contributions to the history of economics in The Development of English Thought (1889); and to the theory of protection, in The Economic Basis of Protection (1886), being one of the few among the younger group at that time who remained advocates of protection.²

For an estimate of Adams see "Memorial to Former President Henry C. Adams," American Economic Review, vol. xii, 1922.

² For an estimate of Patten see the "Dr. Simon Nelson Patten Memorial" in *The Annals of the American Academy of Political and Social Science*, no. 196 (1923); and R. G. Tugwell, "Notes on the Life and Works of Simon Nelson Patten" in the *Journal of Political Economy*, vol. xxxi, (1923).

An economist who died at a much earlier age, was Richmond Mayo-Smith, a disciple of Wagner and Roscher, but who had also been considerably influenced by the German statisticians. Occupying the chair of economics at Columbia University, and giving from the outset a comprehensive course on what he called historical and practical political economy, Mayo-Smith devoted himself primarily to statistical science and created at Columbia a statistical laboratory at which were trained a large number of the leading American statisticians of to-day. The fruits of Mayo-Smith's studies were Statistics and Economics (1888), and Statistics and Sociology (1895). He was also the first to make a scientific study of the immigrant problem in Emigration and Immigration, 1900. The more intensive cultivation of his chosen field was prevented by his early death.

The next group of economists contemporary with the above and who had participated in the hegira to Germany, are all of them still living. Of these, far and away the most important, is John B. Clark, who was a fellow-student of Böhm-Bawerk under Knies. Clark is noteworthy for the application to economic theory of the doctrine of marginal utility which he originated in independence of the work done by Jevons in England, Wieser in Austria, or Walras in Switzerland. Occupying at first the chair of economics at Smith College, where he wrote The Philosophy of Wealth (1886), he was soon called to Columbia University, where he elaborated his theory in The Distribution of Wealth (1899), and The Essentials of Economic Theory (1907). These earned for him the reputation of being one of the five or six great Anglo-Saxon theorists of the nineteenth century, putting him on a level with Ricardo, Senior, John Stuart Mill, Jevons and Marshall. His books were soon translated into many foreign languages, and have profoundly affected not only American, but also European, thought.

Slightly younger than Clark is Richard T. Ely, who succeeded Walker at Johns Hopkins, but who has spent most of his life at the University of Wisconsin. Ely is not so original or so subtle a thinker as some of the others that have been mentioned, but he has a remarkable gift of clear and popular exposition, and he possesses, furthermore, an enthusiasm for the subject which soon disclosed substantial results. He was the leading spirit in

the formation of the American Economic Association, and he became and remained for many years its secretary. His interests are multifarious, and his scientific output has been large. He first devoted himself to the labour problem and public finance, in French and German Socialism (1883) and Taxation in American States and Cities (1888), familiarizing the American public with the newer ideas. Subsequently he devoted attention to the organization and development of industry in Monopolies and Trusts (1900), and Studies in the Evolution of Industrial Society (1903). Later he treated the general theory of property, in the elaborate Property and Contract (1914), in which he showed the influence of Wagner. Of more recent years he has devoted himself to a study of the land problem, and has become director of the Institute of Land Economics. He has also found time to write, in collaboration with some of his students, a text book on Economics which is among the most popular in the United States.

A few years the junior of Ely is Frank W. Taussig, of Harvard University, who has devoted himself primarily to a study of the tariff problem, and has written the standard Tariff History of the United States as well as several volumes of collected studies on the tariff. He has also been interested in questions of general economic theory and his Principles of Political Economy (1911), although not marked by the same originality as some of the other thinkers mentioned above, has acquired a deservedly high reputation among the American treatises on the subject. Noteworthy also are his Wages and Capital (1896), and his Investors and Money Makers (1915). As head of the Department of Economics at Harvard University, he has associated with him a large group of distinguished colleagues who have succeeded in attracting students from all over the world.

In the same group of older men must be mentioned Arthur T. Hadley, of Yale, a student of Gustav Cohn, and who utilized the inspiration received in Göttingen by writing the brilliant book on Railroad Transportation (1885). Hadley followed this by a suggestive treatise on Economics (1896), in which he attempted, this time in conformity with Wagner, to emphasize the connection between law and economics. Unfortunately, his further work in the field of economics was prevented by his

acceptance of the call to the presidency of Yale University, which henceforth occupied all of his time and energy. At Yale also worked Henry W. Farnam, who was one of the favorite students of Schmoller, and who devoted himself chiefly to the social aspects of economics, being responsible for *The Economic Utilization of History* (1913) and other economic studies.

Among the older men still living, apart from the present writer, must be noted one who does not belong to the above group. This is J. Laurence Laughlin, long of the University of Chicago. Professor Laughlin belongs by temperament to the more conservative school of economists, with its opposition to anything that savours of socialism, protectionism or government intervention. In the *Principles of Money*, (1903), he has devoted his efforts to elaborating a doctrine in which he seeks to combat the quantity theory and to approach the subject of price changes from the point of view of influences affecting the demand and supply of the commodities themselves.

In the group of economists who studied abroad, but who are no longer living, may be mentioned President E. B. Andrews, of Brown (1844-1917), a student of Helfferich, best known by his Institutes of Economics (1889); and J. C. Schwab (1865-1916) of Yale, a student of Gustav Cohn, whose chief contribution was A Financial and Industrial History of the South during the Civil War (1901).

We now come to a larger group of somewhat younger economists, some of whom were students of the older group, and many of whom also enjoyed the advantage of study abroad. This group is so numerous that it may best be treated in accordance with the subject matter in which the respective writers have acquired their national, and in some cases substantial international, reputation.

In the field of general theory three separate tendencies are to be noted. The so-called psychological school is best represented by Frank A. Fetter, originally of Cornell, and now for many years at Princeton. Fetter endeavoured in his *Economic Principles*, (1905), to present, as he himself puts it, a "quite new statement of the theory of value, one in accord with the modern volitional psychology, thus eliminating entirely the old utilitarianism and hedonism which have tainted the terms and conceptions of value ever since the days of Bentham." He has had considerable

influence on present-day economic thought, through his emphasis on the doctrine of psychic value, and through his doctrine that capital is to be conceived of primarily as capitalized income.

The second tendency is represented by Thorstein Veblen, long of the University of Missouri, and more recently of New York. Beginning with The Theory of the Leisure Class (1899), and following with a number of other works, among the most important of which is The Theory of Business Enterprise (1907), Veblen stressed the institutional aspects of economics and presented a keen and original analysis of the development of the shortcomings of capitalist society. His exposition is marked, however, by a somewhat exaggerated emphasis upon the presentday financial control of industry. The third tendency is represented by H. J. Davenport, of Cornell, whose Value and Distribution (1908) includes a vigorous criticism of the marginal-utility school. On the other hand, Thomas N. Carver, of Harvard, has not only accepted, but developed, the marginal theory, and has applied it with distinguished success to the doctrine of interest. In his Essays in Social Justice (1915), he has attempted to harmonize economics and ethics.

The theory of statistics has found its chief support in Walter F. Willcox, a student of Mayo-Smith, at Cornell, who has given attention primarily to the problems of population and divorce, and has been of considerable influence in connection with the demographic studies of the United States Census. Henry L. Moore, of Columbia, one of the most subtle thinkers of the day, has devoted himself to the mathematical theory of economics. He has written a number of notable works, such as the Laws of Wages (1911), and a series of volumes on economic cycles, in which he has sought to trace the connection between prices and the underlying weather conditions. His book on Forecasting the Yield of Cotton (1917), has exerted not a little influence in practical economic life.

A relatively large number of scholars have devoted themselves to a study of the monetary problems. Foremost among these is Irving Fisher, of Yale, who was originally a mathematician. He is responsible for a comprehensive study on *The Purchasing Power of Money* (1911), and another on *Index Numbers* (1924). He has also devoted attention to the theory of capital, through

his works on The Nature of Capital and Income (1906), and on The Rate of Interest (1907). Of less international importance, but not without substantial influence at home are the works on monetary theory and history: David Kinley, Money (1904); Davis R. Dewey, Financial History of the United States (1902); W. R. Scott, Money and Banking (1903); and W. G. L. Taylor, The Credit System (1913).

In the field of labour the foremost writer is J. R. Commons, of Wisconsin, who is responsible for a number of fresh and original contributions, as well as for the editorial supervision and partial writing of the great eleven-volume work on The Documentary History of American Industrial Society (1911). In a more recent study on The Legal Foundations of Capitalism (1923), Commons has entered a new and fruitful field. Henry R. Seager, of Columbia, is the author of Social Insurance (1910), of The History of the Shipbuilding Labor Adjustment Board (1921) and of the widely used text book on Economics (1908).

Among the other scholars with a national reputation may be mentioned J. H. Hollander, of Johns Hopkins, perhaps the most graceful writer among American economists, who has cultivated many fields but who has devoted especial attention to the history of economic doctrines, including a suggestive study of Ricardo; William Z. Ripley, of Harvard, who has specialized in transportation, and whose two volumes on *Railroads* (1911), constitute the standard work on the subject; Jeremiah W. Jenks, formerly of Cornell, and now of New York, a practical economist, who has labored primarily in the fields of immigration and trusts; and Carl C. Plehn, of California, who has specialized in public finance, and who has had considerable influence in moulding the tax system of California and other states.

We come next to a group of slightly younger economists who have attained a national reputation. Among these, perhaps the ablest is Wesley C. Mitchell, of Columbia. He is noted for his masterly studies in the field of Business Cycles, and is responsible for the important History of Prices during the Great War. In the field of monetary theory we may signalize Edwin W. Kemmerer, of Princeton, who has frequently been called upon to serve as financial expert to foreign countries, and whose Modern Currency Reforms (1916) is the standard book on the subject.

H. Parker Willis, of Columbia, was for several years secretary of the Federal Reserve Board, and later conducted the research bureau of that Board. His numerous writings on the credit system including the *History of the Federal Reserve System* (1924) have given him a deservedly high place among the economists of the day.

In economic history there are to be mentioned Edwin F. Gay, of Harvard, who, like Ashley in England, originally started with the later middle ages, but who subsequently became interested in the more recent economic problems, and who played a conspicuous part in the economic management of the war. Vladimir G. Simkhovitch, of Columbia, whose earlier studies on the Village Community (1898) and on Marxism versus Socialism (1913) are familiar to the European public, is responsible in his Hay and History as well as in other works, for some suggestive contributions on the influence of the exhaustion of the soil and of the productivity of labour on the course of economic history.

In public finance there are two outstanding scholars in this age group. Charles J. Bullock, of Harvard, has written Essays on the Monetary History of the United States (1900), and Readings in Public Finance (1907) as well as numerous minor studies in fiscal policy. Thomas S. Adams, formerly of Wisconsin, and now of Yale, who was the adviser of the Federal Treasury during the War and the years immediately thereafter, is responsible for many reports and addresses. We must also note Allyn A. Young, of Harvard, who has published a number of important essays on various topics of monetary and statistical theory. Deserving of mention also is Ernest L. Bogart, of Illinois, who has written on war finance.

This brings us to the group of younger economists who have nevertheless attained a national reputation. Among these perhaps the most conspicuous is John M. Clark, of Chicago, following in the footsteps of his distinguished father, and devoting himself to economic theory. His The Economics of Overhead Costs (1924), is one of the ablest contributions of the last decade. In public finance, Robert M. Haig, of Columbia, has attained prominence by his Taxation of Excess Profits in Great Britain (1920), his Reports for the New York Tax Committee of 1916 on the exemption of improvements, and his contributions to the

School Finance Inquiry (1924). Deserving of mention also are Harley L. Lutz, of Stanford, who has written a good text book on Public Finance (1924) as well as a study on State Tax Commissions (1918); and Henry G. Brown, of Missouri, the outstanding single-taxer among American economists.

In statistics, noteworthy work has been accomplished by Wilford I. King, The Wealth and Income of the People of the United States, 1918; by the two Columbia scholars, R. E. Chaddock, Principles and Methods of Statistics (1925), and F. C. Mills, Statistical Methods, 1924; by W. M. Persons, of Harvard; and by W. W. Stewart, formerly of Amherst. In finance, we may mention: B. M. Anderson, Jr., The Value of Money (1917); J. Viner, of Chicago, Dumping (1923), and Canada's International Indebtedness (1924); and the two treatises on Foreign Exchange by A. C. Whitaker, of Stanford (1919), and by Ira B. Cross, of California (1924). In the field of labour, notable work has been done by Paul H. Douglas, of Chicago: P. F. Brissenden, of Columbia; G. G. Groat, of Vermont; L. Levine formerly of Montana; H. Feis, of Cincinnati; S. Blum, of California; and Leo Wollman of the New York School of Social Research. In the history of economics, attention may be directed to E. S. Furniss, of Yale, The Position of the Laborer in a System of Nationalism, 1920; to L. H. Haney, History of Economic Thought. 1920; and to several contributions by O. F. Boucke of Pennsylvania State, and by W. H. Hamilton of the Institute of Economics at Washington. Finally, we note as deserving of mention F. H. Knight, of Iowa, Risk, Uncertainty and Profit (1921), and the treatises of E. Jones, of Stanford, on The Trust Problem (1921), and on Railroads (1924).

This record would not be complete without at least mentioning the contributions to the allied field of Sociology, by those exponents who are also interested in economics. Foremost among these is Franklin H. Giddings, of Columbia, whose early contributions to the theory of economics were notable. Albion W. Small, of Chicago, has written two works on the history of economics: The Cameralists (1909), and Origins of Sociology (1924), which is really a study of German economics in the nineteenth century. Edward A. Ross, of Wisconsin, is respon-

sible for several scholarly books on the borderline between economics and sociology; and W. F. Ogburn, of Columbia, is a specialist on some sociological phases of the labour problem, having made noteworthy contributions on the statistical side.

This survey of the development of economics in the United States, in order to be comprehensive, should include a statement of the periodical literature, an allusion to the condition of economic teaching in the higher institutions of learning, and some reference to the non-academic centres of economic research.

So far as the periodical literature is concerned, we have mentioned above the earliest American journal, the Political Science Quarterly, soon followed by the Quarterly Journal of Economics. both in 1886. In 1892 the University of Chicago began the Journal of Political Economy, which appeared quarterly, up to 1906, and monthly thereafter. In 1911 the American Economic Association started The American Economic Review, which has now for some time been considered the leading American periodical. In 1888 the American Statistical Association initiated its Journal, and in 1896 the American Journal of Sociology was started, with headquarters in Chicago. Finally, in 1920, Harvard University began the quarterly Review of Economic Statistics. There are also two academies whose proceedings often deal with economic problems: the Annals of the Academy of Political and Social Science with headquarters in Philadelphia; and the Proceedings of the Academy of Political Science in the City of New York, with headquarters at Columbia. Of the special publications devoted to labour, transportation, taxation and similar topics there is no space to speak.

Attention may also be called to the collections of monographs under the auspices of the various universities. Of these the most important are the Johns Hopkins Studies in History and Political Science, dating from 1883, and comprising forty-three volumes; the Columbia Studies in History, Economics and Public Law, dating from 1891, and comprising one hundred and seventeen volumes; the Harvard Economic Studies, dating from 1906, and comprising twenty-seven volumes. Worthy of mention also are the somewhat less comprehensive Wisconsin Studies in the Social Sciences and History, the Illinois Studies in the Social Sciences, the Pennsylvania Series in Political Economy and Pub-

lic Law, the Cornell Studies in History and Political Science, the Minnesota Studies in the Social Sciences, the Stanford Series in History, Economics, and Political Science, and the California Publications in Economics.

So far as the academic teaching of economics is concerned, the United States differs from almost all other countries in that the subject is taught not only in the universities, but also in the colleges and even now, during the last few years, in the high schools. The consequence is that the corps of instructors in the higher American institutions of learning, which generally combine both university and college teaching, is rapidly growing, so that the demand constantly exceeds the supply. In some of the leading universities the number of research scholars and instructors in economics is considerable.

The multiplication in recent years of Schools of Business or Commerce, generally affiliated with the universities, has created a large number of additional chairs of economics, frequently filled by incumbents who are devoting themselves to research. Owing to this fact, as well as to the growing interest taken by the educated public in economics, the American Economic Association numbers over three thousand members, and the Academies of Political Science, referred to above, between six and eight thousand members apiece.

In some respects the most striking movement of the last few years has been the creation of well-endowed independent institutions of research, some of them with a large corps of scholars and investigators. Prominent among such institutions are the National Bureau of Economic Research in New York, the Institute of Economics in Washington, the Pollak Foundation for Economic Research at Cambridge, and the Institute for Land Economics at Northwestern. Each of these has put forth a series of noteworthy volumes on various phases of pure and applied economics. Some of them, like the Institute at Washington, afford opportunities also for the instruction of future investigators. In addition, several of the great philanthropic foundations, like the Carnegie, the Rockefeller, the Laura Spelman and the Russell Sage, have begun to make substantial contributions of funds to individuals as well as to groups interested in economic research.

There must also be mentioned, as of peculiar interest, those bureaus in the departments of the federal government at Washington, as well as in some of the state governments, which carry on important and well-supported investigations of a research character. Such bureaus in Washington are found in the Departments of Agriculture, the Treasury, Labor, Interior, Commerce; the Interstate Commerce Commission, the Federal Reserve Board, the Tariff Commission, and the Federal Trade Commission. They have been responsible for many noteworthy reports. Finally, it is becoming the custom among the leading banks and industrial corporations, not only to maintain well-equipped statistical bureaus, but also to provide economic experts who carry on researches along the lines of chief interest to the institutions concerned, and who not infrequently issue the results of their studies in periodical, or more formal, publications.

Taking it all in all, therefore, it may be said that never in the history of the United States has there been so much interest shown in economic science, and that at no time have the prospects for the development of economics been brighter than they are to-day. The American contributions have finally begun to make a place for themselves in the world literature.

CHAPTER FIVE.

AN ECONOMIC INTERPRETATION OF THE WAR

[This originally appeared as a contribution to the volume entitled Problems of Readjustment after the War, 1915.]

There have been almost as many explanations of the great war as there have been writers. The explanations, moreover, have ranged over a very wide field: personal jealousies, dynastic differences, militarism, wounded pride, the endeavour to round out political boundaries, racial antagonism, not to speak of such high-sounding phrases as struggle for liberty, or fight for national existence-all of these and many more have been advanced for popular consumption. What is lacking in them all, however, is a realization of the fact that a conflict on this gigantic scale must be explained on broader lines than any of those mentioned. Wherever our sympathies may lie in the present struggle, it behooves us, as students of the philosophy of history, to take a position far removed from the petty interests of any of the contending parties. Servia tells us that she is fighting for independence: Austria maintains that she is struggling against political disruption: Russia asserts that she is contending for the liberties of the smaller Balkan States; France urges that she is endeavouring to restore freedom to her lost provinces; England puts in the foreground resistance to the insolent pretensions of militarism and protection of small nationalities; Germany claims a place in the sun; and Japan-well, Japan is fighting to defend large rather than small nationalities, that is, to free China from German domination. In each country, with scarcely a single exception, there has been a truly national uprising. Each of the contestants considers that he is fighting for a holy cause. and is thoroughly convinced not only of the justice of his own claims but of the infamy of his adversary's. Rarely in the world's history has there been presented such a spectacle of genuine and universal enthusiasm penetrating every nook and cranny

of the belligerent countries, combined not only with an utter inability on the part of each to understand the position of the other, but also with a fierce and implacable hatred between the more prominent contestants.

But if, amid the actual clash of arms, it is impossible for any of the belligerents to see the situation in its true light, is there any excuse for us, as neutrals and would-be philosophers, to content ourselves with the explanations that are born of mutual prejudice? Is it not rather incumbent upon us to realize that there are deeper world forces at work which are responsible for the present titanic conflict; and if so, is it not somewhat hasty to endeavour to apportion praise or blame for what is the inevitable result of world forces?

1. Nationality and Economics.

The starting-point of our analysis is the existence of nationality. Modern, as distinct from mediæval and in part from ancient, political life is erected on national foundations. city states of classic antiquity or of the Middle Ages, although forming political entities, had no direct relation to the facts of nationality. There were in fact no nations: there were peoples and races and states, but no nations. The Greek states warred with each other, and there was an Hellenic people; but there was no Greek nation. Rome overran the world, and the Roman Empire included many peoples and races; but we cannot properly speak of a Roman nation. In the later Middle Ages, the Italian and the German cities were often at war with their neighbours; but there was no Italian state or German state, and still less an Italian nation or a German nation. Modern political organization, on the other hand, is framed on national lines; and it is now universally recognized that the creation in the seventeenth century of the first great national states on the continent, as well as the solidification of the British commonwealth, was due to economic forces. It was now that what the economists call the local or town economy gave way to the national economy; it was now that land as a predominant economic force was replaced or supplemented by commercial and industrial capital. Land in its very nature is local; capital, in its essence, transcends local bounds. The rise of the national state was an accompaniment of the change in economic conditions.

From that time to this, the basis of national life has been economic in character. We do not, of course, desire for a moment to deny that other factors have contributed. National consciousness is a subtle product of many forces, among which geographical situation, common language, inherited traditions and similar social and political ideals have all contributed to perpetuate the racial characteristics which differentiate one nation from another. That racial and even religious differences have in the past frequently led to sanguinary contests goes without saying; and he would be venturesome indeed who would dare to predict that the future has not in store for the world many a conflict referable to these same causes.

If, however, we trace the history of the world during the past few centuries we are struck by the fact that, on the one hand, nations of different races have lived together in complete amity, and that, on the other hand, separate nations belonging to the same race and the same religion have often indulged in the most violent conflicts. Examples like the war between England and the United States, between Chile and Peru, between Prussia and Austria, could easily be multiplied. If in these cases the old explanation of racial antagonism obviously does not suffice; if, on the contrary, the political contests in such cases were due to more fundamental economic causes, is it not fair to assume that, as between nations of different races as well, similar economic causes often lie at the bottom of the controversy?

While economic considerations indeed do not by any means explain all national rivalry, they often illumine the dark recesses of history and afford on the whole the most weighty and satisfactory interpretation of modern national contests which are not clearly referable to purely racial antagonisms alone. The present struggle is without doubt to be put into the same category. To say, however, that nationalism in its economic aspects is the root of the present trouble is not yet adequate. For we have still to explain why there should have been such a recrudescence of nationalism of recent years. On the contrary, it might be asked,

if the modern age is essentially a capitalist age, why should we not, in the face of the international aspects of capitalism, have a growth of internationalism rather than of nationalism? Why should we not be on the brink of that era of universal free trade, of permanent peace and of international brotherhood for which Adam Smith and the Manchester School so valiantly contended? Why is it that after the downfall of the Mercantile Systemwhich was nothing but the economic side of the great national movement of the seventeenth and the eighteenth centuries—we should witness, hand in hand with the undoubted growth of international intercourse and mutual understanding, the revival of the so-called Neo-mercantilism, as found a generation ago in almost all the continental nations of Europe as well as in the United States? And why should we at this very moment be in the presence of an almost universal emergence of national consciousness which threatens to destroy well-nigh everything that has been won during the nineteenth century, and which in its deplorable aspects is typified no less by the Oxford pamphlets of the English scientists than by the fulminations of the ninetythree German professors or the pronouncements of the French learned societies? What are the world forces which compel human beings, almost perhaps against their will, to act as ignobly as do the foremost representatives of our present-day civilization?

If we read history aright, the forces that are chiefly responsible for the conflicts of political groups are the economic conditions affecting the group growth. These conditions have of course assumed a different aspect in the course of history. The first and most obvious reason leading to an expansion of a political group is the desire to insure a food supply for the growing population. It is to-day a fairly well established fact that the forces which set in movement the migration of the peoples from Asia to Europe and which were responsible for the so-called irruption of the barbarians were primarily the inability to maintain the flocks and herds, owing to the gradual desiccation of the original home, and the necessity of seeking fresh pastures abroad. We have recently been taught that the secret of the implacable enmity between Rome and Carthage was the desire to retain Sicily as the granary of the world. The need of an adequate food supply is the first concern of every political entity.

The next step in the economic basis of political expansion is the desire to develop the productive capacity of the community. This always assumes one of two forms. Where agricultural methods are still primitive and agricultural capital insignificant, the system of cultivation is necessarily extensive. As a consequence, and especially in those countries where slavery has developed, the need of a continual supply of fresh land as a basis for profitable slave cultivation, becomes imperative. It is this fact which explains the Mexican War in the history of the United States, as well as numberless conflicts of former ages in other parts of the world.

On the other hand, where agriculture has been supplemented by an active commercial intercourse, and especially in the case of countries contiguous to the sea, the desire for the increase of wealth based on commercial profits has in the past everywhere led to a struggle for the control of the trade routes. From the time of Phœnicia down to the domination respectively of the Hanse towns and of Venice, the grandeur and decay of civilization may almost be written in terms of sea power.

All these changes, however, were anterior to the growth of modern nationalism. What, then, are the points in which modern struggles differ from their predecessors?

From this point of view it may be said that the first stage of modern nationalism represents an analogy rather than a contrast; and that it is only in the later stages that the real differences are to be sought. In the first stage of modern nationalism we find in fact a combination of the three forces which, as we have seen, played so important a rôle in former times.

The closing of the land route to India, through the Mohammedan conquest of Constantinople, and the discovery of the New World were the two chief factors which led to the development of nationality in the sixteenth and seventeenth centuries. It was at this time that the great colonial empires of Spain, Portugal, Holland, France and England were formed. The struggle to protect the economic interests involved in the colonial system led necessarily to an organization on a national scale. The real basis of the early colonial system, however, was the attempt to secure either raw materials for the incipient manufactures of the mother country, or crude articles like the spices from

the East Indies, or treasure from America. The early colonial system, which itself marks the transition from mediæval feudalism to modern capitalism, thus represents an attempt to increase the area of the supply of certain kinds of food, or the endeavour to expand the basis of productivity by the acquisition of fresh land calculated to yield raw materials or, finally, the effort to secure what was considered the essence of wealth itself in the shape of the precious metals. In order to accomplish each of these results, a great navy was necessary, and such a navy could be provided and maintained only along national lines.

Before long, however, the accumulation of capital derived from the profits of the colonial empire found its chief utilization in an application to industry; and as this capital gradually percolated through business enterprise, the whole form of economic organization was changed. In the place of the mediæval guild system where the same individual bought the raw material, fashioned the commodity, and sold the product to the consumer, there now grew up what was later on known as the domestic system, that is, the system where the first and third stages of the process were in the hands of capitalists who could both buy the raw material and sell the product on a large scale, while the second stage in the process was still carried on by the individual workman in his own home. The emphasis was consequently now put upon the protection of this national industry against its rivals, and the colonies henceforth became important, not so much as sources of raw material as, on the other hand, favourable markets for the commodities manufactured in the mother country. The so-called Mercantile System was badly named: because, although it is true that the prosperity of both colonies and mother country depended on the interchange of products carried on through overseas commerce, the essence of the system was the development of domestic industry on a national scale. The great wars of the seventeenth and eighteenth centuries, fought in order to control the sea and to expand the colonial empire, all had in view the development of the nascent industry on capitalist lines. Protection of industry was, therefore, the characteristic mark of nationalism during this period.

With the advent of the nineteenth century, however, Great Britain was ready to enter upon the next stage of development.

Having built up her industry by the most extreme and ruthless system of protection that the world has ever known, and having wrested a large part of her world empire from her competitors, England now found it to her interest to shift from a system of protection to one of free trade. The free-trade movement, as is almost always the case with great economic transitions, was only ostensibly in the interests of the consumer, but actually in the interests of the producer. Thanks to a favourable conjuncture of events familiar to all scholars, the industrial revolution—which means the complete application of capitalism to every stage of the productive process—took place first in England, and thus consolidated her position of industrial primacy. But as free trade and universal peace were obviously the means best calculated to perpetuate this industrial monopoly. we find Great Britain, from this time onward, desirous of living in amity with all those countries which had formerly been her rivals, but which were now hopelessly distanced in the industrial race and which were henceforth to be regarded as the most desirable markets for the output of British factories.

With the gradual spread, however, of the factory system into the continental countries, a new situation was engendered. the first place, economic pressure upon Germany and Italy gradually resulted in the creation of a political nationality in order to mobilize the economic forces on a national scale. As a consequence, we find emanating from those countries, as soon as nationality was achieved, precisely the same movement of protection to industry which had characterized the Mercantile System several centuries earlier. Just as nationalism was the real basis of the early Mercantilism, so this movement now came to be called Neo-mercantilism. In France, indeed, where, as we know, nationalism had been achieved at an earlier date, the new movement assumed a slightly different form, namely, that of competition for the markets of the world. It was this competition for the world market which now, after the period of quiescence and universal good will during the sixties and seventies, led in the eighties to the new movement for the increase of the colonial empire on the part of both England and France, and which at one time almost threatened to bring those two great nations into collision in Africa. Moreover, the advent

of the industrial revolution in Germany and the transition from the domestic to the factory system immensely increased the tempo of the evolution. Whereas in the first decade after the formation of the German Empire the chief emphasis was put by Bismarck upon protection, now toward the close of the century the national industry had been built up to such an extent that Germany soon joined France in competing for the world market against England.

This transition from a period of protection to a period of competition for markets would not, however, have sufficed to bring about the present gigantic struggle. The most important phase of modern industrial capitalism still remains to be explained. After national industry has been built up through a period of protection, and after the developed industrial countries have replaced the export of raw materials by the export of manufactured commodities, there comes a time when the accumulation of industrial and commercial profits is such that a more lucrative use of the surplus can be made abroad in the less developed countries than at home with the lower rates usually found in an older industrial system. In other words, the emphasis is now transferred from the export of goods to the export of capital.

England reached this stage a generation or two ago. For England, as is well known, has largely financed not only North and South America, but also many other parts of the world as well. In fact, the chief explanation of England's immense excess of imports is to be found in the profits from her surplus capital annually invested over the seas. Because of her later transition to the factory system, France followed at a subsequent period. but even then only to an inconsiderable degree. For in the first place, the virtual cessation in the growth of population prevented any such increase of output as in England, although naturally augmenting the per capita wealth, and especially the prosperity of the peasant. And in the second place, since the French are far more conservative, largely for the reasons just mentioned. their annual surplus, such as it is, has been invested chiefly in contiguous countries like Spain and Belgium, and later on, for obvious reasons, in Russia. Thus France did not develop into any serious competitor of England in the capital market of the world. On the other hand, the significant aspect of recent development is the entrance of Germany upon this new stage of development. The industrial progress of Germany has been so prodigious and the increase of her population so great, that with the opening years of the present century she also began on a continually larger scale to export capital as well as goods. It was this attempt to enter the preserves hitherto chiefly in the hands of Great Britain that really precipitated the trouble. For if the growth of national wealth depends upon the tempo of the accumulation of national profits, and if the rate of profits is, as we have seen, far greater in the application of capital to industrially undeveloped countries, it is clear that the struggle for the control of the international industrial market is even more important than was the previous competition for the commercial market.

Other and more familiar phases of the economic struggle have no doubt played their rôle in the various countries. It is indubitable, for instance, that Russia, still a predominantly agricultural community, is endeavoring to secure Constantinople partly in order to obtain an unrestricted vent for her wheat, partly in order to acquire a port which will not be icebound for the greater part of the year, and partly in order further to consolidate the basis of her national wealth. Austria, which is somewhat further advanced in industrial development, is assuredly interested in preventing interference with her economic hegemony in the Balkan States. Germany, because of her close union with Austria, is almost equally concerned in resisting the Russian pretensions. France, finally, would naturally seek to recover her lost provinces whenever the opportunity for an effective coöperation with Russia presented itself. So that those who desire to interpret the war on the lines of an economic struggle between the Teuton and the Russian civilizations would find no little basis for their contentions. All these, however, would not suffice to explain the one thing which needs elucidation: Why has the present contest attained the dimensions of a veritable world war, and why has it become clear, not only to the dispassionate observer, but to the contestants themselves, that the real struggle is between England and Germany?

2. The Stages in Rivalry.

If, however, Germany and England are the real antagonists, the true interpretation of the war must rest on this antagonism. From this point of view it is significant that England should now for more than three centuries have fought her way up with successive rivals in turn. In the sixteenth century England was opposed to Spain; in the seventeenth century. England's chief fight was against Holland; in the eighteenth century her greatest antagonist was France; and now, finally, she has locked horns with Germany. To the student of economic history, the present war, however, was just as inevitable as its predecessors; in this case, as in the others, it seems unnecessary to advance the minor explanations which are currently found. England's war with Holland was a struggle for the control of the seas as a prelude to the expansion of national industry. England's wars with France were contests for colonial empire resting on a competition of markets for goods. England's war with Germany marks the final stage of a competition involving not simply the export of goods, but the export of capital.

While Germany was in the first stage of economic nationalism she took relatively no interest in colonial expansion, but was busily engaged in consolidating her industrial power and in utilizing to that end the same weapon of protection which had served Great Britain in such good stead in preceding centuries. With the consolidation and development of industrial enterprise Germany soon entered upon the second stage of economic nationalism, that of competing for the markets of the world. The export of commodities thus led naturally to colonial expansion, as a result of which the early Bismarckian policy was reversed. With the beginning of the present century, however, Germany entered upon the third stage of economic nationalism, supplementing the export of goods by the export of capital. Now it was that there emerged the real rivalry with England. Now for the first time there came into view the possibility of the financial control of large sections of the world, of which Morocco and Asiatic Turkey are good examples. These efforts for financial control represented a penetration of backward countries by a developed capitalism—a peaceful penetration if possible, but a penetration at all costs. For Germany was learning the lesson from England's experience, and was fully aware of the fact that a financial or capitalistic domination is the surest avenue which leads toward commercial growth and which renders probable the greatest multiplication of profits.

This consideration seems of slight weight. Is it not true, it might be urged, that capital is invested in foreign countries by people of all nationalities, and that the stock of modern corporations pursuing their activities in any country is distributed among investors of all financial countries? This criticism, however, does not touch the core of the matter. For in the first place corporation policy is not influenced by the minority stockholders at all; and it is determined, so far as nationality is concerned, by that of the controlling directorate. The fact that the shares of the South African mines were traded in on the Berlin stock exchange did not affect the close connection of the British mining corporations with the Boer War. And in the second place, the political influence which goes with financial authority is itself responsible for all manner of economic advantages, direct and indirect. It would be tedious, as well as unnecessary, to recite in detail the countless benefits that England has derived from India, or more recently from Egypt, and the numberless subtle ways in which she has contrived, just as every other nation would have done, to retain most of these benefits for herself. For who will in any way doubt that under modern conditions political preferment is the real open sesame to economic advancement? We have only to point to what is taking place at this very moment between China and Japan.

The German statesmen were simply learning their lesson from the vast book of English experience. The German economists were, almost to a man, united in the belief that, while it may not always be true that trade naturally follows the flag, it is clearly not open to doubt that political influence paves the way for economic superiority and vastly enhances the opportunities for economic preferment. It was primarily to augment this political influence and to clinch these expected financial and commercial advantages that a large navy, with coaling places and stations throughout the world, became a necessity. This attempt, however, necessarily constituted a challenge

to England's virtual monopoly of sea power upon which her ability to feed herself depends, and engendered in both countries the state of mind which has finally resulted in the present conflict.

To say, then, that either Great Britain or Germany is responsible for the present war, seems to involve a curiously shortsighted view of the situation. Both countries, nay, all the countries of the world, are subject to the sweep of these mighty forces over which they have but slight control, and by which they are one and all pushed on with an inevitable fatality. England, no less than Germany, Austria no less than Russia, cannot escape this nemesis. How idle is it, therefore, to speculate as to what the particular torch may have been which set fire to the conflagration! How bootless is it to attempt to estimate from the blue book or the white book or the yellow book which statesman or set of statesmen is responsible for the particular action that led to the declaration of war! If the war could have been averted now, it was bound to break out in the more or less immediate future. Germany like England, Austria like Russia. Italy like Servia, each was simply following the same law which is found in all life from the very beginnings of the individual cell—the law of expansion or of selfpreservation.

It is a curious fact that no one should hitherto have attempted to explain the paradox of increasing internationalism combined with the recrudescence of the newer nationalism which we are witnessing today. And yet, in the light of the preceding analysis, the explanation is simple. In the earlier days of civilization the stranger was the enemy because the economic unit was the local unit. With the slow growth of trade, these barriers were gradually broken down and the feelings of enmity attenuated, until, as in the Roman Empire, natural law developed as the law common to all peoples. In the same way, in the later Middle Ages, the local antagonisms were disappearing before commercial progress, until we even find dreamers who several centuries ago welcomed the speedy advent of the universal republic and proclaimed the impending reign of a world citizenship. As we have seen, however, the creation of industrial capitalism and the birth of nations in the sixteenth and seventeenth centuries consolidated the economic interests along national lines. While individuals now considered themselves citizens of a country rather than of a town, national antagonisms became stronger than the older local antagonisms. Yet after the first fierce onset of national power, the forces of internationalism began to assert themselves, and international law was born, although never becoming a very lusty infant. A little later, however, when Great Britain had completed the first stage of nationalism through protection. it was so clearly to her interest to emphasize the ties that bind nations together, that her philosophers and economists found for a time a more or less ready response to their cosmopolitan teachings among those countries which were not yet quite prepared to start on the road of nationalism. Thus it was that by the middle of the nineteenth century the precepts of Adam Smith were now taken up by Cobden and Bright, and were reëchoed in Germany, in Italy, in Russia, and in other industrially undeveloped parts of the world—with the one significant exception of the United States, which, having entered upon her first real stage of nationalism, turned a deaf ear to the preachings of the Manchester School.

With the progress of the industrial revolution in the United States, however, and with her gradual transition at the beginning of the present century from an exporter of food to an exporter of finished products, the United States was getting ready to take its place side by side with England in preaching the gospel of cosmopolitanism and good will, and in emphasizing the forces which make for the growth of international trade. Had all the nations of the world been on the same level of economic progress, the very existence of capital as an international force would have lent a mighty support to the spread of good feeling and international fellowship. Unfortunately, it was precisely this equality that was lacking. In the absence of such a situation, the exploitation of the capitalistically undeveloped countries by the few nations which had reached the third stage of economic nationalism, that of the export of capital as well as of goods, became the keynote of a new struggle. Thus it is that modern capital, which on the one hand works toward real internationalism, peace and public morality and which will ultimately be able to accomplish its beneficent results. is at the same time responsible for the weakening of international law and the revival of a more conspicuous and determined nationalism because of the greater prize to be achieved and the fiercer struggle necessary to win it.

In the political life of the world to-day we see the same forces at work as in all life from the very beginning-the forces which we sum up under the terms of the competitive and the coöperative process, the individualistic and the collective movement. Just as the animal organism was built up by a combination of the struggle between the cells and coöperation among them; just as human society has developed through the advance of the individual working hand in hand with the growth of the group; so the world society that is slowly coming to pass is evolving in obedience on the one hand to the competitive spirit of national struggle, and, on the other, to the coöperative forces of internationalism—both of them inherent in the modern factory system, resting upon industrial capitalism. At certain stages in the world's history the one set of forces seems to be in the ascendency, at another stage the opposite set; but in reality they are complementary and are always working together. It is the industrial revolution with the factory system and the growth of capitalism which has set in motion the mighty forces both of world coöperation and of national antagonism.

In the light of what has been said, the present and the future of the United States form an especially interesting subject for consideration. When this nation was born it was for some decades weak and puny. It was the genius of Alexander Hamilton which realized the true economic basis of nationalism and which attempted to start the country on its real career. The gradual dominance of American politics by the South, the economic basis of which was agricultural rather than industrial, was, however, responsible for good as well as for evil. The emphasis upon states' rights indeed almost destroyed the Union; but the need of a wider basis of productivity under the extensive system of slave labour was responsible for the Mexican War and the rounding out of our imperial domain. It was only with the completion of the Civil War that this country as a whole entered on the first real stage of economic nationalism. Thus it was that the United States, following the example of Great Britain a century before,

built up an enormous industrial power through a system of national protection. We are now just beginning to reach the stage attained by Great Britain three generations ago, the stage. namely, of transition from the export of agricultural products to that of the import of agricultural produce and the export of manufactured products. We have not yet reached, and it may well be at least some time before we reach the third stage of economic nationalism, that of the export of capital on a large scale as the typical form of profitable enterprise. When we reach that third stage, which, as we have seen, carries with it the struggle for the exploitation of the relatively undeveloped parts of the world, our real trial will come, and the true conflict between nationalism and internationalism will begin. Then, and then for the first time since the development of our national forces, shall we have an opportunity to test the foundation of our historic friendship with Great Britain. Then, and then for the first time, will the situation arise when Great Britain, instead of being bound solidly to us by the bonds of her financial interest in us, will face the United States as a rival, a rival on the international market for the control of the capitalistically undeveloped countries. Whether by that time the forces of internationalism will prevail and good will and peace continue, or whether, on the other hand, the United States will be impelled, perhaps against her will, to make her politics the football of her economic interests, can be foretold by no one.

3. The Probable Future.

Finally it may be asked what is to be the outcome of all this? Are wars to go on forever? Is the present struggle, gigantic though it be, simply a forerunner of wars still more colonial? Or, on the other hand, are the dreams of our pacifists to become true, and is universal peace to be realized?

If there is any truth in the preceding analysis, both of these things are coming in the fullness of time. That is, we are to have more wars, but we are to have ultimate peace. The reason that we are to have more wars is simply because of the fact that what we call the industrial revolution is in reality only a gradual change, and that this change is but slowly permeating

the world. That part of the earth's surface which is occupied by countries with a highly developed industrial capitalism is relatively small. Although capitalism is spreading throughout the West and South of the United States and effecting a lodgment in Canada and Japan and Russia, it is only beginning in the rest of Asia and Africa as well as in South America and Australia. As long as there are vast stretches of territory still waiting to be developed, so long will they prove to be a lure to the industrially advanced nations of the world. England, and to a much less extent France, have until recently provided this capital. Whatever be the outcome of the present war, however, nothing, if our analysis is correct, can check the ultimate tendency of countries like Germany, and later on Japan and the United States, to be followed still later by other countries, to endeavour to secure their share of these lucrative opportunities. Whatever may be the immediate results of the present situation, or with whatever great success the attractive and even noble ideal of an imperial British federation may be realized, England can scarcely expect in the long run to retain the monopoly or the domination which she has achieved and which she built up during the nineteenth century as a result of the lucky accident of being the first country to experience the industrial revolution and to exploit her coal supply. England's primacy was no doubt deserved, and is assuredly welcome to many of us; but from the point of view of world forces, it is difficult to resist the conclusion that it also is destined to disappear. Rome was able to create a world empire and to maintain it for several centuries because there was no economic expansiveness in the outlying constituent members of the empire. Great Britain will find it far more difficult to create a world empire permanently dominating all other countries, for the simple reason that industrial capitalism is destined to overrun the world. Even today England is able to retain India only by strict commercial control and by sedulously preventing the growth of any important national industry in that huge empire.

The above forecast as to the probability of the continuance of war rests indeed on an assumption that may be challenged. It might be urged that civilization is progressing so rapidly that the nations of the future will realize the economic waste, the inexpressible horror, and the irreparable ravages of war, and that common decency and ordinary humanity will impel the world into an abandonment of what is essentially the mark of savagery. However deeply and even passionately we may desire such a consummation, it must be confessed, in all humility, there seems to be slight warrant for its expectation. If indeed the chief nations of the world were to abandon all efforts to secure selfish advantage for themselves: if an international pact could be arranged so that each nation would cheerfully divide its opportunities with its neighbors, and would welcome the entrance of continually new claimants into the agreement; if, in other words, generosity were to replace selfishness in national arrangements, the outlook might, indeed, be very different. But with the frailty of human nature, as it unfortunately still exists; with the undoubted national consciousness which is suffused at present with the distinctively modern emphasis upon the importance of the material basis of the higher life; and, above all, with the opportunity afforded to each nation to reach out for its share of almost boundless prosperity by grasping the new opportunities afforded to modern capitalism, it seems hopeless to expect any effective resistance to a temptation which is so compelling, so illimitable, and so promising of success under the conditions of actual economic life. No more striking illustration of the real forces that dominate the foreign policy of modern nations can be found than the vain effort recently made by certain Italian statesmen to repress the popular feeling and to prevent their country from joining a war the horrors of which had been for months clearly before the eyes of all. Pacificism seems destined, for the near future at least, to remain an unattainable ideal; for it is both blind and deaf to the effect of modern capitalism in accentuating, rather than attenuating, the lure of the economic life.

But if, then, we are likely to see during the next few generations wars on an even greater scale than the present one, will this endure forever? Not if our analysis is correct. For when once the time comes that industrial capital will have spread to the uttermost parts of the earth; when China and India and Africa and the rest will all have been as fully supplied with capital as are now Great Britain and Belgium and Germany; when, in other words, the industrial revolution will have permeated the world, then the economic basis will have been laid

for two supreme events. In the first place, there will no longer be any exploitation of the backward countries, because there will be no industrially undeveloped countries to exploit. Then the whole world will be divided up into a series of empires, perhaps a dozen or more, on a level of comparative equality economically, and therefore politically. With such a relative equality of industrial development, and in the absence of any important foreign territory to be exploited, each nation will then find it to its interest to develop what is best within itself in order to carry on a peaceful exchange of commodities with the other nations. Then, and then only, will Adam Smith's dream be realized, namely, that each nation will be able to utilize its own climatic and other economic advantages in a peaceful struggle with other nations. Then, and then only, will universal free trade become profitable to all, and the rule of international amity become enduring. Then, and then only, shall we have the secure foundation laid for the world republic and for the coöperation of all races and of all peoples toward a common ideal.

In the second place there is the industrial revolution. Just as the industrial revolution changed England from an aristocracy to a democracy, just as the industrial revolution in the United States is re-creating a new South on a democratic basis, so the spread of the industrial revolution will bring democracy throughout the world and will enable every country to turn its efforts to the ideals of a political and a social democracy. Then we shall not have to spend more money for dreadnoughts than we do for social progress.

To predict how soon this change will come about is idle. All that can be said is that the change is in progress, and that in this change there seems to lie the chief hope of the world's future. What the particular economic organization of the future is to be, it is not the purpose of these pages to discuss. Our point will have been attained if we clearly keep in mind the inevitable spread of industrial capitalism, irrespective of the fact by whom the capital is to be controlled. Capitalism on an international scale may well lead during the next few decades to a strengthening of certain forms of international coöperation and fellowship, so ardently desired by all forward-looking thinkers. But industrial capitalism will not have completed its allotted

task until it shall have brought about the reign of national economic equality which alone will serve as the basis of an enduring internationalism. Whatever may be the influence of the other factors, ponderable or imponderable, that contribute to civilization, it is scarcely open to doubt that the dominant forces which are actually moulding history today are primarily economic in character, and are as a consequence intimately associated with the great transition that is at present taking place in the economic organization of the world. Unless the present conflict is studied in the light of these world forces, its lesson will not have been read aright.

[The argument in the preceding pages, advanced when the present League of Nations was unthought of, supports the views of those who claim that the League can accomplish its noble aim only by emphasizing the equalization of access to, and control of, the economic resources and opportunities of the world. The argument also discloses the futility of America's aloofness from the League, in vain reliance on the traditional doctrine of political isolation. If the League does not succeed in controlling the present wave of nationalism, the "isolation" of the United States will be impotent to protect it from being dragged into the next war. In the meantime our abstention from the League and our deplorable refusal to help in creating a world code of civilisation or in developing international economic cooperation may well become the chief factor in bringing about the next world war.

The general influence of economic forces in human development is more fully treated in the present author's *The Economic Interpretation of History*, 2nd ed., 1907.]

CHAPTER SIX.

RAILWAY TARIFFS AND THE INTERSTATE COMMERCE LAW.

1. General Consideration.

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When Solomon de Cause first advanced the idea of employing steam as a propelling power, in 1615, he was shut up in the madhouse as a hopeless maniac. Two centuries later, in 1812, when Colonel Stevens of Hoboken proposed to build a steam railway at far less cost than the projected Erie canal, he was regarded as absurdly visionary and somewhat demented. And yet today, within the short span of a human life, we have the vast network of over three hundred thousand miles of iron roads covering the civilized world. It is the central factor of recent economic development. Little wonder, then, that the weighty problems of railway management in its relations to the owners, the employees, and the public, should engross the earnest attention of legislators and publicists throughout the world.

The Interstate Commerce law of 1887 is the first serious attempt at governmental regulation for the whole of the United States. It may be well, therefore, to discuss the provisions of the act in the light of general principles. We shall confine ourselves primarily to a consideration of the railway tariffs, and shall attempt to ascertain the underlying doctrines and their limitations.

Railway tariffs may be regarded from two essentially different standpoints,—the private and the public. In so far as a railway is a business corporation, it is a private matter. It may fix its prices in accordance with general business principles. It will endeavor to subserve primarily the interests of its owners. It will strive for the greatest possible profits. Its course is legitimate and praiseworthy. But in so far as the railway forms our public highway, it is a public matter. The objective point now is the general welfare, the interests of the community. It aims

not at the greatest possible profits, but at the greatest possible benefits. It looks not at the interests of its owners, but at the interests of the public. The one point of view is individual, the other is social. The modern railway corporation shares both these characteristics. Its nature is hybrid. To subordinate the public to the private element is plainly inadmissible. Entirely to engulf the private in the public element is equally unfair, as long as the railway is not owned by the state. Given the private corporation, the question is: How shall the two elements be reconciled? It is the problem of railway legislation and corporate regulation.

The inequality of railroad charges forms the pith of the complaints usually made. It is the crucial point of corporate management. On the one hand we have the anti-monopolists, who liken the common carriers to the feudal barons of old, using the mediæval weapons of unjust privilege and ill-gotten power to carry out their ends of rapacity and favoritism. On the other side we have the railway managers, who exultingly exclaim, in so far as charges are concerned: All that is, is just. Where now is the truth of the matter?

The principle commonly advanced by the antagonists of the railways, as well as by the would-be reformers, is that of cost of service. Charges should be regulated in accordance with the cost of the particular transaction to the company. This is certainly not the actual method. Is it the correct method? Let us see.

Railway expenses are divided into two great classes,—fixed charges and operating expenses. By fixed charges is simply meant the interest account, the sum necessary to meet the periodically recurring interest on the mortgage debt.¹ The proportion

¹In Europe, not only the interest on the funded debt, but also the dividends on the capital stock are sometimes included in the "fixed charges." This is manifestly fallacious, as it is not legitimate to class as expenses what are really profits. Rates are nowhere determined by the prospective profits, but vice versā. Cf. Nördling, Die Selbstkosten des Eisenbahntransports und die Wasserstrassenfrage, Vienna, 1885, pp. 206-210. The matter is, however, of less importance from the fact that with us railways are generally constructed on the proceeds of the mortgage bonds, not of the capital stock, as in Europe. The interest, hence, far exceeds the dividends. In 1885, e.g., 186 million dollars were paid in interest, 77 millions in dividends. Cf. Poor's Manual for 1886, p. i. For European figures, see Loisel, Annuaire spécial des chemins de fer belges, 1886, pp. 246 et seq.

of fixed charges to operating expenses varies, of course, with each line. A careful calculation on the different branches of a single road found the interest charges to vary from 26 per cent to 59 per cent of the total expenses.¹ But in a rough way it may be said that fixed charges amount to from forty to fifty per cent of the entire expenditures, not alone with us, but also in Europe.² In other words, well-nigh half the expenses are constant or invariable. They do not change with the amount of business transacted, but are independent of the traffic. They remain the same whether there be much, little, or no additional traffic.

On the other hand, the operating expenses may be divided into several categories. No uniformity has as yet been attained in the classification of expenses, although the national commission has been empowered to prescribe a uniform system. One method is to divide the expenses into: (a) maintenance of road, buildings, and general expenses; (b) station expenses; and (c) movement expenses. Class a will in general be but very slightly affected by the amount of business transacted. Considerable variations in the traffic may take place without a proportionate, if any, increase in the expense involved. They may therefore likewise be set down as constant or invariable expenses. Class b will vary, but only in part, with the business transacted. A certain organization must always be maintained, whether the traffic be heavy or light; but after a definite limit is passed, more men must be employed to do more business. These expenses are thus only partially constant. Class c, finally, fluctuates almost in proportion to the business transacted. The less trains, the less expense.

The proportion of each of these three classes to the whole will of course vary with the widely different characteristics of each line; but in general it may be affirmed that about one-half of the operating expenses are constant or invariable.³

¹ Fink, Cost of Railroad Transportation, 1882, table A, p. 4, for the Louisville and Nashville Railroad.

See the tables in Sax, Die Verkehrsmittel in Staats- und Volkswirthschaft, 1879, ii, 368. For France in particular, Baum, Annales des ponts et chaussées, Mémoires, 5^{me} série, t. i, p. 422.

Manager Haines, of the Savan. Fla. & W. R. R., divides operating ex-

^{*}Manager Haines, of the Savan. Fla. & W. R. R., divides operating expenses into five classes, and makes a careful calculation that 53 per cent of such expenses do not increase with additional business. Report of Senate Select Committee on Interstate Commerce, 1886, App., p. 138. We shall hereafter speak of this as the Cullom report.

The total constant expenditures of a railway are thus, in accordance with the above explanation, the fixed charges plus one-half the operating expenses. In other words, a large majority of railway expenses are irrespective of the amount of business. They remain the same, notwithstanding an increase or decrease of the traffic.¹

This distinction between constant and fluctuating, or between fixed and variable expenses, is of vital importance to a correct understanding of the principle of railway rates. It leads to certain conclusions which form the fundamental explanations of actual tariffs.

It is unnecessary to explain the wide disparity of cost of carriage on different lines, or for individual transactions. Certain characteristics affect the roads themselves, such as the grades. the curves, the weight and speed of the trains, the cost of construction, the quality of the supplies, the changing conditions under which the service is performed at different seasons. etc. These alone would show how difficult is the task of accurately determining the cost of carriage for any one service. But the task is complicated by other difficulties. It is apparent that the cost of transportation per ton-mile must vary with the tons and the miles, i.e., with the quantity of the freight and the length of the haul. But these differ widely in each case. On one line the greater portion of the freight is carried over its whole length: on another the local business far outweighs the through traffic, so that the capacity of the rolling stock is not fully utilized. On one line the traffic moves in great part in one direction, and the number of empty cars returned is abnormally large; on another there is far more back-loading and a more even distribution of the traffic. On one line the trains are started with full loads. on another they are half empty. The proportion of paying to dead weight, or the amount of the tare, is of paramount impor-

¹Mr. Fink's calculation varies but slightly from the above. He asserts that upon an average of \$1 earned in the roads of the United States, 40 cents are required to pay 4½ per cent interest on bonds and stock, 35 cents to pay the movement expenses, and 25 cents to pay maintenance and general expenses. Cullom Committee, Test., p. 95. The New York commission divide operating expenses into maintenance, general and transportation (including station) expenses. But the result is the same. For Europe, see Ulrich, Das Eisenbahn-Tarifwesen, 1886, p. 40, but corrected as to Germany in Archiv für Eisenbahnwesen, 1887, p. 253.

tance.¹ All these causes influence both the tons and the miles, and thus affect the cost per ton-mile.

Logically, the cost per ton-mile is resolvable into two portions, -that which corresponds to the constant or fixed expenses, and that which corresponds to the fluctuating or variable expenses. The former portion is ascertained simply by dividing the constant expenses by the total ton-miles. It will therefore vary inversely to the traffic.2 But as the constant expenses form by far the larger portion of the whole, the rate per ton-mile will be determined by this corresponding portion. We conclude then that the cost tends to vary almost inversely to the traffic—the more traffic, the less the cost per ton-mile; the less traffic, the greater the cost per ton-mile. That is to say, even if it were feasible to construct a tariff based on the cost of service of each particular transaction, -in itself a work of gigantic magnitude and infinite difficulty,such a tariff would be of very slight avail unless the amount of freight remained an unalterable quantity. So soon as the volume of traffic changes, the cost of service is necessarily altered. The rate would no longer be based on cost of service.

Furthermore, the amount of traffic itself depends to a large extent on the rate. Low rates produce large traffic; high rates make little traffic. This has led to the paradoxical conclusion that cost of service depends on the rate, and not inversely that the rate depends on cost of service. We thus have a curious interaction of cause and effect. But of course this is true only within certain limits, and subject to serious qualifications. The success of a decrease of rates in attracting additional business will operate only up to that point where increased traffic does not imply disproportionately increased expenses. If the addi-

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if there are 7,500,000 ton-miles, cost = \frac{750000}{7500000} = 1 c. per ton-mile; if there are 10,000,000 ton-miles, cost = \frac{750000}{1000000} = 0.75 c. per ton-mile; if there are 5,000,000 ton-miles, cost = \frac{7500000}{7500000} = 1.5 c. per ton-mile.
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The average gross weight of freight cars of all classes in the United States is eight tons per car. The average load they carry is five tons. Hence, 59 per cent of the weight hauled in freight traffic is non-paying or dead weight. In passenger traffic the non-paying load is almost 90 per cent, because the cars are not so fully packed. In Germany, in 1880, the dead weight was: for freight cars, 53 per cent (or taking only the loaded cars, 27 per cent); for passenger cars, 76 per cent; for baggage cars, 97 per cent.

^a Suppose that the constant expenditures for transporting seven and a half million ton-miles amount to \$75,000. Then—

tional business necessitates large expenses, like a double track, it may cost more than it is worth. Low rates do not always increase net profits. Again, the success of a decrease of rates will diminish with every additional diminution of the rates. There is a certain limit beyond which the efficacy of reduced rates as a financial venture becomes very problematical. The business is not expansible. On this account the railways rarely reduce charges simultaneously on all kinds of traffic, but experiment gradually with special classes or kinds of business, and even then are often unwilling to undertake the reduction at all.

But if it is even partially true that cost of service depends on the traffic, and therefore on the rate, it cannot be wholly true that the rate depends on the cost of service. The two principles are mutually contradictory. We are thus logically forced to the conclusion that railway charges are not and cannot be based on cost of service alone.

Cost of service does not fix rates. It forms in the long run only the minimum limit of rates. A well-managed road will not consciously continue a losing business, unless, indeed, it be operated by the state as a tax on the community, and no serious thinker has yet proposed this method of running railways. Differences in cost of service between two roads result not in proportionate differences in rates, but simply in different profits. Differences in cost cannot imply corresponding differences of rates. The principle is as applicable to portions of the same line as to different lines, since no two parts of the same line have the same cost of service; and hence if the principle were consistently applied, it would be necessary to make a different rate for each mile of every road, which is absurd. But if rates are fixed according to the average cost of service for the whole line, they may equally well be fixed for the average cost of service on all business, in which cases the element of difference

In regard to freight traffic, the above statement is notoriously true. In regard to passenger traffic, cf. the history of third-class traffic in England. In 1844 the railways had to be compelled by law to run cheap trains for third-class passengers, their opposition being silenced only by exempting these trains from the passenger duties. But before long these very trains resulted in immense profits, and to-day constitute by far the most lucrative portion of the passenger business. Cf. also the strenuous opposition of the New York elevated railroad to the five-cent bill, while to-day the profits are immensely increased by the voluntary reduction.

of cost for each particular transaction is entirely eliminated. No freight is ever shipped at the average cost of service.

It would hence be foreign to our purpose to attempt an exact mathematical computation of the cost of service. Not only would it be necessary to ascertain the exact percentage of fixed to variable expenses in each particular case, but further to calculate the exact proportion of increase of cost to increase of traffic. Numerous endeavors have been made, but no two agree.\(^1\) And even if successful they would, as we see, be of very slight practical utility.

The cost of service principle is neither practised nor practicable. The attempt to base rates solely on cost is a pure chimera. Well-nigh every expert, whether scientist,² official, or legislator, and every parliamentary commission, from the early English to the late Italian and American, absolutely discards it as a principle.³ But although the rule is impracticable, it is asserted by some to be the only just, the ideal method. Before discussing this, let us ascertain the actual principle according to which tariffs are arranged. Only then shall we be able to answer the question of the relative justifiability of the two principles.

How, then, are rates actually fixed? The object of a railway is to make the greatest possible net profits, *i.e.*, to increase its traffic and to decrease its expenses. This it finds can be best attained by lowering the charges on certain classes of goods, or on the same classes to different localities. In other words, what decides the manager is not so much the *cost* of the service as the *value* of the service. This practice has been called "charging what the traffic will bear," an unfortunate expression and liable

¹Cf. the works of Chanute, Morehouse, Fink, Kirkman, in America; of Fairbairn, Gordon, Lardner, in England; of Garke, Scheffler, Schüller, Schüller, Nördling, in Germany; of Baum, Jacqmin, Gournerie, Brière, in France; of Brioschi, Genala, Calvori, in Italy.

³ Even Wagner, the great apostle of state railways, comes to the same conclusion in his last edition. *Finanzwissenschaft*, 3. Ausg., i, 760-763.

^{*&}quot;The movement of a commodity by rail is determined by considerations wholly independent of and not affected by the cost of the service to be performed." Cullom Com. Rep., p. 184. For Italy, of. Atti della Commissione d'inchiesta sull'esercizio delle ferrorie italiane. 1881. Parte ii, Riassunto, ii, 932-953. For England, of. Joint Select Committee on Railway Cos. Amalgamation, 1872, pp. xxxiii and li. For France, see Rapport de Waddington, 1880, in Picard, Chemins de fer français, t. 5, 1884, p. 128. Cf. also the statement of the advisory commission on differential rates to the seaboard (Thurman, Washburne, and Cooley) in Proceedings of the Joint Executive Committee, 1882, p. 29.

to much misconception. Charging what the traffic will bear, correctly understood, simply serves as an excuse for reducing rates on the low-class traffic, because it cannot bear higher rates. The phrase is a bad one, because it may be interpreted into meaning that the greatest possible charges on high-class goods are also legitimate. Correctly understood, it justifies lower charges on certain kinds of business; incorrectly understood, it seems to justify extortionate charges on other kinds of business.¹

Charging what the traffic will bear, in its strict sense, does not fix rates; it determines only the maximum limit of charges, just as mere cost of hauling fixes the minimum limit. Between these limits the rate varies with the value of the service, or, as is sometimes said, is made to conform to the requirements of trade. It becomes a commercial question, and subject to the law of supply and demand. In so far it is a purely private matter. But the railway is also partly a public institution: hence the necessity for important qualifications of the private business principle, for serious limitations of the law of supply and demand. These qualifications and these limitations have often been completely ignored by the railways, because of their mistaken assumption of being purely private enterprises. Let us study the limitations as well as the principle.

Charging according to what the service is worth results in the two fundamental principles of classification and discrimination.² Classification is due to the fact that the same service has a varying value when rendered to different commodities. Discrimination (i.e., local discrimination) is due to the fact that the same service has a varying value when rendered to different places. Whether the same service has a varying value for the

¹The celebrated phrase of M. Solacroup, the French Railway director, is hence regrettable: "En matière de tarification de transports il n'y a qu'une seule règle qui soit rationnelle; c'est de demander à la marchandise tout ce qu'elle peut payer. Tout autre principe est arbitraire." Professor Villey calls it "une phrase vide de sens." Traité d'économic politique, 1885, p. 206.

The word discrimination is not always used in the same sense. Some use it to imply any variation from the cost of service, and make it include classification, which is to them a discrimination between articles, as opposed to a discrimination between persons or places. But this is misleading. A classification as between two articles may be due to a difference in cost of service, in which case there would be no discrimination in the above sense. To make classification of this kind a part of discrimination is illogical. It is far preferable to separate the two terms completely, defining discrimination as is done below.

freight of different persons, and may thus give rise to personal discriminations, is a question to be treated by itself.

Classification.—Value of service influences classification in a double way: it puts the same articles into different classes; it puts different articles into different classes. It puts the same articles into different classes according to the methods of transportation, and makes a distinction between slow and fast delivery. With us this takes the form of freight and express traffic. Our general classification applies only to freight traffic. In Europe, where separate express companies are unknown, the rates are graduated according to this distinction—goods and parcels rates, petite and grande vitesse, Frachtgut and Eilgut. Such a classification is of course perfectly legitimate, whether from the standpoint of value or from that of cost of service. The better service benefits the goods and at the same time increases the expenses of the railway.

Far more important, however, is the classification of different articles into different categories. The primary element here again is value of service. Cost of service, indeed, influences classification to a minor extent in so far as the articles differ in bulk, shape, risk, direction or regularity of shipment. By bulk is meant the proportion of dead to paying weight. One car may be filled with 2000 lbs. of baskets, another with 30,000 lbs. of iron or sand; and yet the cost of moving the cars may not appreciably differ. Manifestly, the charge per 100 lbs. on baskets should be higher than on iron or sand. The tare becomes an important factor of the cost. Actual computations again have demonstrated that the shape of the articles influences the cost. especially the terminal expenses, far more than might at first appear. The risk, when incurred by the railway, is also a legitimate ingredient of cost, and varies greatly with the nature of the article. The question of direction involves that of back-loading and affects articles differently on each particular line. Finally. some articles are sent intermittently in small lots, while others are shipped with great regularity and in such quantities that the railway can easily accommodate itself to the traffic. Every shipment has its own peculiarities, and it thus happens that articles of equal value may be put into different classes.

But actual rates are fixed mainly not by cost of service, but

by what the service is worth. Classification depends only in a subordinate degree upon cost. The controlling element is value. not cost. Cheap goods must be charged less than dear goods, although the cost of service may be greater. The main point is the development of the traffic. The goods must not be charged so high rates as to render their transportation impossible or unprofitable. We must keep in mind the distinction between the fixed and the variable expenses. If the freight can be secured at rates which will more than cover the variable expenses,—the actual hauling and a proportionate part of the station expenses, -it will pay the road to take this freight, because an addition, however small, is thereby made to the fixed expenses. These would have to be met at all events, whether that particular freight were taken or not. A small contribution to fixed expenses is better than none at all. The choice is between freight at a rate slightly above mere cost of operation, and no freight. Yet to apply this low rate to all commodities would of course render it impossible to meet the fixed expenses or to earn profits. other words, it is profitable for a railway to transport certain classes of freight at rates which if extended to all business would ruin the company. Classification of freight is not only necessary. but justifiable and beneficial. The meagre surplus above hauling expenses in the cheap goods contributes, if ever so little, to the fixed expenses, and diminishes to this extent the amount which it is necessary to raise from the remaining traffic. The higherclass goods can be transported at rates which are lower than would otherwise be the case. If we had no classification, not only would we not have cheap wheat or cheap meat, but the charges on all the other articles would be raised per ton-mile. It reduces the rates on the cheap goods immensely, and the rate on the dear goods moderately. Classification is based, in the main, on the principle of value of service. An advance of ten cents per hundred pounds on coal would soon make its influence felt, and might double or treble its value; a similar advance on silks or dry goods would exert but an inappreciable influence on their value.1 The same rate which would prohibit the transpor-

¹ Articles are thus classified primarily and chiefly according to their value; but the classification is modified by the tare, i.e., proportion of dead to paying weight, and in exceptional instances by the other considerations of cost.

tation of one commodity may scarcely be felt by another. The principle of classification is the first corollary from the distinction between fixed and variable expenditures.

To uphold the legitimacy and necessity of classification is. however, quite another thing from maintaining the justifiability of all actual tariffs or from attempting to palliate undeniable abuses. The early roads started with but little classification. The first English charters indeed contained statutory maxima for a number of articles. The Stockton and Darlington Railway act prescribed three classes, the Liverpool and Manchester act five classes.1 These were based chiefly on the old canal acts. In the United States very few of the state charters fixed either maxima or classification.2 The result was a very simple system. It was found, however, that a gradual modification and differentiation of the charges conduced not only to a development of the traffic, but also to a growth of business prosperity. But the matter of classification with us to-day is in a well-nigh chaotic state. It is made to depend on the numberless exigencies and conditions of business life. It is lacking in uniformity, in stability, and very often in justice. The tariffs of the present day on our main lines are a great advance upon those of several years ago, but there is still enormous ground for improvement. The point to be noticed is that these wide powers of fixing the classes are put in the hands of private individuals as sole arbiters. While the principle of classification is perfectly just, the liability to abuse of the principle arises from the fact that the authority is given to only one of the parties in interest. It is this which arouses the indignation of the public and emphasizes the necessity of public control.

But we must be careful not to let our indignation carry us too far. The abuses of classification are on the whole the lesser abuses of railway management. They take place only within narrow limits, because it is the interest of the railway manager to charge those rates which tend to develop the traffic. Exorbitant

¹ Some of the earliest toll and maximum rate clauses are reprinted in Grierson, Railway Rates, 1886, pp. lxv-lxxii. Also, more fully in Report of Select Committee on Railways, 1881, part ii, app. no. 55.

² For a good collection of the earliest charters, see G^{mo} Tell Poussin, Chemins de fer américains, 1836, pp. 211-271. See also W. P. Gregg and B. Pond, The Railroad Laws and Charters of the United States, Boston, 1851.

charges for any class will lead to decreased shipments. Mistakes may be made, but when the railway is honestly managed the mistakes will be rectified. The great advantage of the traffic associations or pools is that they minimize the danger of dishonest management in any single road, and bring about a greater uniformity and stability. The dressed-beef controversy is a case in point.1 We do not imply, with many of our eloquent railway officials, that there is a necessary identity of interests between the railways and the people. Our past history unfortunately does not bear this out. It would be absurd to depend on this imagined harmony as a remedy for actual abuses. But it is equally foolish to go to the other extreme with popular demagogues. Classification should indeed be supervised by public authorities, but the demand for a rigid law prescribing all details, would impute to our legislators a knowledge which they cannot possess. And those who advocate state management in the United States forget to think of the havor that would be created by the simple political influence of our lawmakers. A congressman represents a district noted for the production or manufacture of certain articles: what more simple method of appeasing the clamor of his constituents than by changing the article in question from class 3 to class 4? Were the state to own the railways under our actual political system, the claims upon our legislators for spoils would be increased a thousandfold. To cure the abuses of classification by letting our congressmen fix the classification would indeed be jumping from the frying-pan into the fire.

An escape from the dilemma seems to be outlined in the principle of advisory boards or consultative councils akin to those lately instituted in Europe. The German local councils 2 are elected by the chambers of commerce and agriculture, and it is incumbent on the railway officials to consult with them on all important questions affecting the tariffs. True, the decision lies ultimately in the hands of the railway authorities, but these are public, administrative officials. The system has worked admirably. In Italy, where the law of 1885 has prescribed eight uni-

¹See Proceedings and Circulars of the Joint Executive Committee, Freight Department, for 1884, N. Y., 1885, pp. 90-95, etc. Cf. also the recent unification of east and west bound trunk-line tariffs to six classes, in place of four and thirteen.

² Bezirks-Eisenbahnräthe.

form classes for all the lines, a council with subordinate divisions composed of railway and state officials as well as representatives of commercial interests supervise the actual charges. In France, where nothing similar exists, notwithstanding the ministerial homologation or approval of rates, the state is still struggling with the railways in the endeavor to bring about a simplified classification. England's condition is almost as chaotic as ours. Of the attempt to suppress all abuses of classification by the heroic step of abolishing or restricting classification itself, as in the compromise or car-space system of central Europe, we shall have more to say later on. But it is clear that classification per se is legitimate.

2. Discrimination.

As opposed to classification a discrimination may be defined as an inequality in the charge for hauling a like quantity of similar articles for an equal distance in the same manner. The definition includes four points. The quantity, the articles, the distance, and the manner of transportation must be the same.³ If a railway charges in one case one cent per ton-mile for wood between Hartford and New York, and in another case two cents, this is a discrimination. It may take place because two different persons sent it from Hartford or because in the one case the wood was shipped at Hartford and in the other at Boston. All discrimination is hence either personal or local. A personal dis-

¹ Consiglio per l'esame delle tariffe ferroviarie.

² Lord Stanley's bill of 1887, § 24, like Mundella's bill of 1886, provides for a revision of the classification by the Board of Trade, to be ultimately enforced by law. This is a step in advance,—perhaps too great a step.

³ To haul one ton for 2 cents and two tons for 4 cents; to haul coal for 2 cents and wood for 4 cents; to haul coal one mile for 2 cents and two miles for 4 cents; to haul wood for 2 cents by slow freight and for 4 cents by fast freight or express, is thus no discrimination. In each case one of the four

elements of the definition is lacking.

Hadley, Railroad Transportation, 1885, p. 108, defines discrimination as a difference in rates not based on corresponding difference in cost. This is manifestly incorrect. The cost of service per ton-mile from A to B may be 1½ cents, from A to C, a station further on, only 1 cent (since cost decreases with distance). This difference in charges to B and C is a discrimination against B, although based on a corresponding difference in cost. It may be a valid discrimination, but it is a discrimination, and is everywhere regarded as such. The same holds true of personal discriminations, which may sometimes be proportional to cost of service.

Then, again, Professor Hadley makes discrimination include classification. But, as we have seen, classification may be partly based on cost of service.

crimination is called a preferential rate; a local discrimination is called a differential rate.¹ Let us analyze each.

Personal Discrimination.—Differences in rates based on classification we found to be essentially legitimate. It is difficult, however, to find any principle on which to base distinctions between two or more shippers for a similar service. Personal discriminations are beyond cavil the most flagitious abuses of arbitrary railway management. Concessions made to large shippers do not, up to a certain point, come within this general condemnation. Allowance for quantity or making a distinction, e.g., between car-loads and less than car-loads, is within certain limits defensible, and is practised in some shape in every country. But this is really a matter of classification, and may be upheld by the advocates of cost of service in the same way that classification into slow freight and express is defended. A well-filled car costs undeniably less in proportion than a half-filled car. But the difficulty is to select the unit of classification above which the rates shall be the same for all persons. Shall it be the pound, hundredweight, ton, or car-load; or shall there be no unit at all? No country has as yet adopted the pound as a unit. In England we have the "smalls" carried at lower rates, and other distinctions made in the mineral and special classes. With us the common unit is the hundredweight, because of the diversity of our car-loads, which vary from 20,000 to 60,000 lbs. The classification, however, generally specifies the minimum weight which entitles to car-load rates. Distinctions between ordinary and car-loads are everywhere permitted, and one of the fundamental principles of the "natural" and "reform" tariffs in Germany is that rates should differ with the quantities of

¹This nomenclature, although exact, is not always followed. It is used in the English Sclect Com., 1881, Evid. qu. 13302. Some make "differential" rates cover all discriminations, so that a preferential rate would be a differential rate. Others again call all discriminations preferential rates. But this is confusing. In the United States "differential" rate is sometimes used in a peculiar sense. The rate from Chicago to New York, e.g., is taken as a basis. A certain number of cents are added to or subtracted from this rate for all stations west or east of Chicago. These variations are termed differentials and are based to some extent on distance. The effect of these "differentials" is thus to attain an approximate equality of charge per tonmile, while a differential rate as commonly understood in European practice and in scientific works all over the world amounts simply to a discriminating rate or an absence of equality of charge. The latter method is more logical and scientific.

freight (up to ten tons). Of course it costs less to transport car-loads than single lots, but that is due only to the amount of the tare. If the single lots are packed closely, so as to fill the car, their dead weight would be greatly diminished. At all events it is almost impossible to fix the exact difference of cost, and in very few instances do the differences in cost warrant the actual discrimination. So that, even if we adopt the principle of cost of service, the distinction between car-loads and smaller shipments is only partially justifiable and may often work injustice to the small shipper. The attempt, however, to make the pound the unit of shipment would still be premature, although it may be the ultimate outcome of the controversy. Allowance for quantity below a moderate limit excites but little complaint and increases the efficiency of the railway.

But if this comparatively unimportant difference—which is in reality a species of classification—is in itself only partially justifiable, what shall we say of those vastly greater discriminations which cannot even claim cost of service as an ostensible reason? Such a practice is indefensible on any theory whatsoever. To build up one man's business at the expense of another can never be acknowledged a legitimate function of the common carriers. To give this power to private corporations would be to strike at the root of commercial prosperity. Such discriminations are sometimes defended on the plea of allowance for quantity. But allowance for quantity not based on cost of service is robbed of all pretext for existence. Whether a train-load is hauled for one shipper to one consignee, or for ten shippers to ten consignees at the same point makes very little difference in expense to the carrier. Furthermore, the matter rarely arises in this way. In almost every case of concessions to large shippers but few cars are in fact forwarded at a time. The favoured shipper's freight is hauled in the same manner as that of his competitors, and the special rates are granted only because of the contract to forward a larger number of cars per month or year.2 The cost to the railway is not appreciably smaller, but the advantage to

¹ See a typical case of rates on baseball bats to Council Bluffs, where the difference between ordinary and car-load rates amounted to 157 per cent, thus crowding out the small shippers. Cullom Committee Report, Test. (Wicker), p. 759.

² Cullom Committee Report, p. 191.

the large shipper is obvious. The special rates enable him to control the market, the control of the market secures him the special rates. It is a see-saw working both ways. Allowance for quantity of this kind can hence not be justified even in the partial way that the distinction between car-loads and ordinary freight can be upheld. The cost-of-service principle cannot be invoked.

Reduced to this extremity, the advocates of personal discrimination are wont to assert that a business firm makes wholesale rates less than retail and gives special figures perhaps to every customer. Why is not the same principle, they ask, applicable to the railroad business? They utterly fail to perceive that a railway is not simply a business corporation, but something far more; that it is a public trust and forms to-day our public highway: that a merchant is not bound to treat his customers equally and may favor his friends without violating any law of business ethics, but that a railway is a body of delegated powers; that it exercises public functions, is invested with public rights, and therefore has public duties. This is the important qualification of the principle that the question of railway rates is a mere commercial question. To make concessions for large shipments is to arrogate powers of wide-reaching potency; it is a claim which cannot be acquiesced in or defended. The wholesale principle or allowance for quantity when carried to this extreme becomes utterly untenable.1 And the claim is in fact no longer

¹The report of the Hepburn committee is thus open to question: "The principle of wholesale rates enters as legitimately into railroad carriage as into any private business." But this is qualified by the clause: "Where additional quantity ceases to lessen cost of carriage, or be of pecuniary advantage to the road, the differences should cease." Report, p. 65.

An interesting discussion of the principle of wholesale rates as applied to jobbers and retailers may be found in the report of the Iowa commissioners, an exceedingly able body. The celebrated case is Merrill & Keeney vs. Chic. & N. W. &c. See Report, 1883, pp. 678-686, and further discussion in Report, 1884, pp. 71-77. The commissioners go too far in the defence of the wholesale principle and err in making classification and differential rates depend upon this principle. These depend on the contrary on the distinction between fixed and variable expenses. Only in so far as allowance for quantity depends on cost of service, is it legitimate. The wholesale principle per se is not applicable to railroads. Cf. Test. of Manager Haines, Cullom Com. Rep., App. p. 143. Notwithstanding the report of the Iowa board, the distinction between jobbers and retailers was abandoned. Of late there has been a movement to abolish even car-load rates. But the arguments of the board have thus far prevented it. Report, 1885, pp. 45-53; 1886, pp. 31-46. From the railway standpoint the wholesale principle is indeed a "fundamental"

upheld by our best railroad men.¹ But although no longer theoretically defended, such discriminations are still actually practised. Not only concessions to large shippers, but, what is worse, personal discriminations resting on no other basis but pure favoritism, are yet of common occurrence. The revelations of the New York assembly investigation of 1879 are fresh in the minds of all. A great improvement has indeed taken place in the eastern lines, but secret rebates or substantially similar favors are by no means a thing of the past.²

Personal discriminations then cannot be defended upon any theory of railway rates. They must be stopped at all hazards. But how? The common law forbids them, but the inhibition of the common law has been of little efficacy. The fear of incurring the displeasure of the railways has acted as a serious check to the institution of suits. To rely on free competition as a panacea is absurd. Personal discriminations are most glaring when competition is most active. Cut-rates and rebates are never so common as during the railway wars. The surest method of preventing personal discriminations is just the opposite, i. e., universal combination or monopoly, in other words state ownership. This in fact was one great reason why the railways were purchased by the Prussian government.³ But state ownership is out of the question at present in the United States. With our actual political conditions and our unreformed civil service, the abuses would be intensified, not lessened. There are only three methods, or combinations of methods, which can settle the question.—juditruth," as the commission says; but from the public standpoint the "funda-

truth," as the commission says; but from the public standpoint the "fundamental truth" vanishes. Railway profits, as we shall see, are no excuse for inequality of charge.

¹Cf. Fink in Hepburn Com. Rep. Exhibits, p. 149, and The Railroad Problem and its Solution, 1883, pp. 10, 41.—Cf. Cullom Com. Rep., Test. of Blanchard, p. 159; Firth, p. 466; Furber, p. 333; Kimball, p. 1238; Mink, p. 437; Wistar, p. 516. [The only two exceptions are Ackerman, p. 604, and Meek, p. 1049.] Also Jewett and Vanderbilt in Hepburn Com. Rep., Test., pp. 1481 and 130. So Alexander, Railway Practice, 1887, pp. 21, 59.

²Cf. the testimony of a railway official: "I have been doing it myself for years, and had to do it." Referring to the effort to get the business of a number of millers from another company, he adds: "I can accomplish my purpose better by picking out one good smart, live man and giving him a concession; . . . let him go there and scoop the business. I get the tonnage, and that is what I want. . . . You can take hold of one man and build him up at the expense of the others, and the railway will get the tonnage." Cullom Rep., Test., Wicker, p. 778.

*Cf. the Argument for State Railroad Ownership (a translation of a Prussian parliamentary document of 1879), New York, 1880, pp. 43 et seq.

cial regulation, legislative and administrative regulation, development of the pooling policy. The history and merits of each, as well as the method pursued in the Interstate Commerce law, will be discussed below. But preferential rates cannot in any sense be upheld as a corollary of the principle of value.

Local Discrimination.—Quite different from preferential rates are differential rates. Differential rates may arise in two ways: through the desire of the railway to develop its traffic, or through the action of competitive centres. The road may wish to extend its traffic in commodities coming from a distance. If they are to be carried at all, they must be transported at less than the regular rates. A commodity which comes from a point a thousand miles distant cannot afford to pay the same rate per mile as one which comes ten miles. The traffic will not bear it. To charge the same rate per mile from Kansas to New York as from New Jersey to New York would simply put a stop to the Kansas traffic. Hence arises the necessity of a distinction between local and through rates. Goods coming from a distance must be treated in the same manner as cheap goods. Local discrimination is like classification. The distant freight is the cheap freight, the near freight is the dear freight. The underlying principle again is value of service. The act of transportation adds far more to the value of the distant than to that of the near freight. Annihilation of distance is proportionate increase of value.

But secondly, local discriminations may arise from competition in the centres of traffic, whether the competition be due to railways or waterways. Two lines meet, e.g., in Buffalo. The old line wishes to retain its business, the new line wishes to develop a new business. Rates from Buffalo to New York will immediately fall, and the competition may be carried so far as to reduce rates to or below the level of mere transportation expenses. Local rates may remain unaffected. The result will be a disproportionately small charge to the point of competition. The number of competitive centres in the United States is immense, the quantity of local discriminations is hence corre-

¹ In 1886, of the 33,694 railway stations in the United States, 2778 were junction points. Chief of Bureau of Statistics quoted in *Congressional Record*, Jan. 12, 1887, p. 562.

spondingly large. A lower rate to the competitive centre is the sole condition of the retention of the competitive traffic. Increase of charges means a destruction of the business.¹

From the standpoint of the railway, therefore, the principle of differential rates is beneficial. It is due in the last instance to the distinction between fixed and variable expenses. Any rate on the through business above mere operating expenses is pro tanto profitable. The surplus goes to defray the fixed expenses. Rather than not get the traffic at all, the railway will take it at reduced rates, and yet these reduced rates if applied to all business would be ruinously unprofitable. The charge per mile on the longer haul may be less than the charge per mile on the shorter haul. How much less it may be is of no concern to the railway, as long as operating expenses are paid. The only endeavour is to retain and extend the traffic.

From the standpoint of the public the principle of differential rates is also justifiable—as a principle. The element of competition would in itself not be a valid justification. Whether the freight is carried by one route or another, ceteris paribus, makes no difference to the shipper, except indeed that public interest might oppose competition of foreign railways. But the long-haul consideration is of vital importance to the public. It becomes the question of having the goods transported at the lower rates, or not having them transported at all. The industrial progress of the nineteenth century is due to cheapened methods of production. Whatever tends to reduce the cost of transportation and to eliminate the element of distance in so far increases national prosperity. Only under a system of differential rates does this development become possible. Without local discriminations the growth of our country would be set back many decades. They form an indispensable condition of national prosperity.

The legitimacy of the principle of differential rates may be inferred from considering the effects of their abolition. The opposite of a differential rate, *i.e.*, a different charge per mile, is an equal mileage or *pro rata* rate, *i.e.*, the same charge per mile. We pass over the absurd inconsistency of those who in the

¹Cf. Michaelis, Die Differentialtarife der Eisenbahnen, i, 1873; Boinvilliers, Des transports à prix réduits sur les chemins de fer, 1878.

same breath advocate cost of service and pro rata charges. One of the plainest principles of railway economics is that cost of service becomes relatively less as the distance traversed becomes greater. To transport an article twenty miles does not cost twice as much as to transport it ten miles. Only a portion of the expense increases with the distance. The greater part is independent of distance, so that the cost of service diminishes with every additional mile. The separation of terminal charges, which are of course irrespective of the distance traversed, from pure hauling expenses, would diminish, but by no means remove, the objection. Hence to base equal mileage rates on the principle of cost of service is illogical. Even according to the doctrine of cost, differential rates are legitimate. Rates absolutely proportional to cost of service would be differential rates.

But omitting the question of logic, what would be the effect of pro rata charges? Here both theory and practice come to our aid. The theoretical conclusions have been well formulated in various governmental commissions; the practical illustrations have been afforded by the working of our Granger laws and, in a greatly modified extent, by the experience of some European railways. Nowhere, perhaps, has the matter been more tersely put than by the English parliamentary committee of 1872:2

- (a) It would prevent railway companies from lowering their fares and rates, so as to compete with traffic by sea, by canal, or by a shorter or otherwise cheaper railway, and would thus deprive the public of the benefit of competition, and the company of a legitimate source of profit.
- (b) It would prevent railway companies from making perfectly fair arrangements for carrying at a lower rate than usual goods brought in larger and constant quantities, or for carrying for long distances at a lower rate than for short distances.
- (c) It would compel a company to carry for the same rate over a line which has been very expensive in construction, or which, from gradients or otherwise, is very expensive in working, at the same rate at which it carries over less expensive lines.

^a This has led to the sliding-scale and zone systems—mileage rates decreasing with distance—in various parts of Europe, and even in the United States.

² Joint Select Committee on Railway Cos. Amalgamation, 1872, Rep., p. xxxii, where the conclusions of the Royal Commissions of 1865 are reformulated. The Select Committee of 1882 reprints the conclusions and discusses them at length. Report, pp. ix et seq.

In short, to impose equal mileage on the companies would be to deprive the public of the benefit of much of the competition which now exists or has existed, to raise the charges on the public in many cases where the companies now find it to their interest to lower them, and to perpetuate monopolies in carriage, trade, and manufactures, in favour of those rates and places which are nearest or least expensive, where the varying charges of the companies now create competition.

In like manner, the New York commission concludes, after a comprehensive review of the whole subject, that pro rata charges are injudicious and absolutely impracticable. The Senate committee of 1886 did not even consider the proposition worth a separate discussion. The late French and Italian commissions hold the same views.2 American experience is no less emphatic. The first Granger law, enacted in Michigan in 1871, prescribed equal mileage rates—with a slight modification for short distances. Even as changed by the law of 1873, these rates were so utterly impracticable that they were disregarded by the railways with the tacit consent of the people. The commissioner pronounced the duties imposed upon him impossible of fulfillment.3 The fixed-distance tariff of Iowa, according to the law of 1874, proved to be so unequal and unjust in its operation that it was repealed shortly after.4 The results of the Potter law of 1874, in Wisconsin, and of similar enactments in Minnesota and Illinois, were equally convincing. They proved to be a burden rather than a relief. The demand for equal mileage rates is an emanation of crude ideas; the outcome of $\mathfrak a$ laudable demand for equality, which would in actual practice result in glaring inequality and in an abandonment of the greatest benefits conferred by railroad transportation. Differential rates or local discriminations form a necessary part of

Report of the Board of Railroad Commissioners on the Pro Rata Bill, 1884, p. 125. Also the Annual Report for 1884, App. 63. Pro rata laws are described as "straight-jackets, preventing perhaps some positive evil, but dulling the energy and cramping the development of business. They hamper legitimate efforts at expansion."

a "È altresi un fatto incontestabile che il sistema delle tariffe differenziali ha contribuito a rendere più forti e migliori le industrie nazionali," etc. Atti della Commissione d' Inchiesta, 1881, Riassunto, ii, 832. For France see the report translated in the English Select Com. Rep. (1882), App., especially

^{*}Cullom Committee Rep., p. 109.

^{*} Eighth Report of Iowa Board of R. R. Commissioners, 1885, p. 35.

all railway management.¹ They constitute the second corollary from the distinction between fixed and variable expenditures.

The principle of value of service may thus be analyzed into the two constituent elements of classification and local discrimination. But now the question arises: Is value of service indeed a just basis for railway charges? Should not cost of service be preferred? We leave the domain of practicability and come to the field of justice.

Let us first ascertain whether the value-of-service principle is indeed so novel in transportation charges as the anti-monopoly league and others maintain. This assertion may be categorically denied. The old turnpike tolls in England, as in America, whether for vehicles or animals, were not the same for all, but were divided into different categories. The English turnpike acts fixed higher rates for coaches than for dray wagons; according to the doctrine of cost of service they should have done the opposite. In France the charges on the highways varied not only from road to road, but frequently from day to day, keeping pace with the intensity of the traffic.2 The charges on the canals again were nowhere based on cost of service: not only were differences of charge made according to the value of the commodities transported, as on the American and English canals, but in many instances differential rates were charged, although no one thought of opposing them in principle.3 So the earliest railway acts were based unconsciously on value of service. In the charter of the first English steam railway-the Stockton and Darlington-among other charges which deviate from cost of service we find that rates on coal destined for exportation are fixed at 4d. per ton-mile, but on all other coal at ½d. per ton-mile. Similar distinctions may be found in most of the early charters. In the United States these provisions were not so common, simply because there were very few chartermaxima for freight. But at all events these examples prove that the cost-of-service principle was by no means avowedly followed. What has been called, even in the official documents the "out-

¹Cf. Aucoc, Les tarifs des chemins de fer, 1880, p. 43.

De Foville, Transformation des moyens de transport, 1880, p. 63.
On the Pennsylvania canal there were 12 classes, the rate varying from 0.6 to 4 cents per ton-mile. For Europe, cf. Sax, Die Verkehrsmittel, 1878, i, 180; Jacqmin, De Vexploitation des chemins de fer, 1868, i, 368.

rageous principle" or the "audacious plea" of value of service is thus not a new departure. The principle is as old as the improved methods of transportation themselves.

Moreover, the value theory is not so opposed to the cost theory as is frequently imagined. We know that lower rates for cheap (or distant) goods increase the traffic and thus diminish the cost of service. The value of the articles thus affects traffic and cost. And since the reduction of rates for cheap goods leaves only a small surplus above operating expenses for fixed charges, while higher rates affect the dear (or near) goods very little, there is no valid reason why the latter should not be made to bear a proportionately larger share of the fixed charges. From the standpoint of justice no exception can be taken to the principle of value, even regarded as a product of the principle of cost.

But is the doctrine of cost of production itself universally applicable as the foundation of prices? What the railway produces is transportation; its cost of production is cost of service. It is claimed that the utilities produced by the railway, like all utilities which are the subject of exchange, should be regulated by cost of production. This, it is asserted, is the only just law. But such a conclusion is of doubtful validity. Even granting that cost of production forms a just basis for prices, no one claims that actual business prices of each particular commodity vary with the cost. The application to railway rates is plain. The cost of service theory might logically demand that the sum total of charges should vary with the cost, but not that the price of each individual transaction should be fixed by its cost of service. Even were this practicable,which we have seen is not the case,—it would not be theoretically defensible.

The principle of value of service has a firmer foundation. Railway charges cannot, indeed, be fixed like prices in general, simply by demand and supply. This is the mistake of the railway officials who attempt to justify all charges.² Railway

¹Report of Mass. R. R. Com., 1885, p. 35. Cf. the minority view of English Select Com. of 1882, Rep. p. liv.

² So de la Gournerie, Etudes économiques sur l'exploitation des chemins de fer 1880, pp. 118, 119; Grierson, Railway Rates, 1886, p. 68; and most of the American writers.

transportation is more than a simple business; it is a semi-public occupation, a public trust. Hence the necessity of restricting the inequalities of every-day commercial practice. But to oppose the abuses of a principle is quite another thing from demurring to the principle itself. The value-of-service doctrine, correctly understood, simply applies the methods already followed in certain public relations. It fixes charges according to the ability to pay—the same principle that is recognized in taxation. Charging what the traffic will bear is a rough way of stating that the charges are proportioned to the capacity or ability of the articles that compose the traffic. It will not be questioned that the endeavours to develop traffic can be realized only by making lower charges for the cheaper (and distant) goods. But the element of justice is introduced as soon as we show that such a method graduates charges according to ability. Of course it does not follow that all rates actually charged are just rates. The inference simply is that the principle of value, as a principle, is not open to the objections often urged. The ability of an article to pay, its capacity to contribute to the payment of the expenses, is an undeniably valid basis for rates. As it is well expressed by the Cullom Committee:

The capacity of each commodity to contribute to the payment of the fixed charges is measured by the extent to which the cost of its transportation fixes its market value and determines the question of its movement. In the case of commodities like coal, stone, ore, beef, corn, lumber, etc., the freight charge constitutes the principal item of cost to the consumer; however small may be his contribution to the general burden, it is relatively greater than that made by the consumer of high-priced articles, such as clothing or dry goods, e.g., the selling-price of which is not appreciably affected by the freight charges, even though unreasonably high.¹

And what is true of the cheap goods is true of the distant goods. For the purposes of transportation they stand on precisely the same footing and are subject to the same conditions. The principle again applies equally well to passenger traffic. Even in the United States there are virtually different classes, and the higher fares for the better service may be upheld on the principle that the passengers in the higher-class cars possess

¹ Report, p. 185.

more ability to pay large fares than those in ordinary or emigrant cars. The-value-of-service principle is based on supposed ability to pay.

But now the difficult question arises. We have shown that the low-priced wares possess less ability to pay than the highpriced wares. Does it follow that the more valuable wares, by reason of their greater ability to pay, should be charged higher rates than the average, or than would otherwise be the case, in order to compensate for the lower rates of the cheaper goods? Does the principle of value imply this compensating action, and is this principle of compensation valid and just? This is the puzzling question. To give a precise answer is not so simple as it might appear. We may, indeed, assert with decision that difference in value implies a difference in ability to pay, but it is rather arbitrary and hazardous to assert exactly what relation there is between value and ability. Shall an article of double the value pay twice the rate; and if not, why not? The difficulty, in fact, is exactly the same that is met with in the problems of taxation. One of the fundamental principles of equity in taxation is that the contributors should pay taxes in proportion to their ability. A rich man ought to pay more than a poor man; the difficulty arises when we must determine exactly how much more he ought to pay. Is the difference of ability proportional to their property, or to their income, or to their expenses? Or, again, should the difference of ability be measured not by a proportional, but by a progressive, scale of taxation,-should there be a progressive property, or a progressive income, or a progressive expense tax, rather than a proportional tax? None of these questions can be declared definitely settled by the science of finance. The answers are necessarily vague because of the relativity in the test of ability.

Exactly the same considerations are applicable to railway tariffs. Difference in value implies difference in ability. The cheap articles possess less ability than the dear goods, and should thus pay lower rates. But to determine how much higher rates the others should pay is not a self-evident proposition. The question is a relative one, and the rates may vary within wide limits. It is precisely because the question is a relative one that the many abuses of railway management have arisen. This rel-

ativity, the possibility of making undue differences within the limits of the just principle, becomes therefore a strong argument in favour of some form of public regulation.¹ The unhampered railway management may pursue the correct policy of charging what they think the service is worth, but their opinions may vary within wide limits. There is, in other words, such a possible elasticity or flexibility in the methods of fixing the details that the actual charges may be far from adequately satisfying all demands. This fact above all others has earned for the doctrine of charging what the traffic will bear the deserved epithet of "haphazard" estimate.² The doctrine of free competition and uncontrolled liberty does not follow from the principle of value of service as the foundation of railway tariffs.

But at all events one point has been gained. The principle of value, within these wide limits, is a principle which not only does determine railway tariffs, but which, although liable to abuse, is a correct principle. It is just because it is founded on the principle of ability. It is neither new nor "outrageous." It is not only a just principle, but, as we have seen, the only practicable principle. The-cost-of-service doctrine can no longer put forth the exclusive claim of justice as the basis of railway tariffs.

One exaggeration, however, must be avoided. The principle of value, we said, implies the doctrine of compensation. But this does not imply that the higher charges on the dear goods or local traffic are higher than they would be if there were no lower charges on the cheap goods or through traffic. Were the rates on the cheap or long-distance traffic to be raised, it would not be transported at all; and since its contribution to the fixed expenses would fall away, the whole expense would necessarily be borne by the dear and short-distance traffic. The rates on the latter would have to be increased to make good for the loss of the former; the dear and local freight would pay even more than it pays now. Those who object to the principle of value because it unduly raises the charges on high-class and local business thus utterly fail to perceive that in many cases it

¹Cohn, Untersuchungen über die Englische Eisenbahnpolitik, iii 1883. p. 84, concludes that the railways must therefore be owned and managed by the state. But such a conclusion is not at all necessary.

²Sir B. Samuelson, Report on Railway Goods Tariffs, etc., 1886, p. 20.

produces just the contrary effect. The principle of value often lowers the rates on the dear goods, and renders possible the transportation of the cheap goods. It is the long-distance traffic which has enabled the American railways to reduce their charges, through as well as local, far below the level of European tariffs. *Pro rata* charges, or even rates based solely on cost of service, would give us tariffs much higher than those in actual use; they would level up, not level down.

Classification and differential rates are thus legitimate and necessary expedients: legitimate, because based on value; necessary, because without them railway transportation would become vastly less efficient. The same analysis would show the illegitimacy of personal discriminations, even in wholesale transactions. Classification and local discrimination reduce rates for the traffic which is less able to pay; personal discrimination reduces rates for the traffic which is better able to pay. Reduced rates to large shippers increase the advantages of the strong; rates fixed according to value tend to diminish the disadvantages of the weak. Preferential rates are wrong because not based on the principle of value; differential rates are right because following the doctrine of value. Preferential rates invert the considerations of ability; differential rates maintain the principle of ability.

But we must not be misunderstood. While the principle of charging what the traffic will bear is essentially just and legitimate from the railway standpoint, from the public standpoint it must be regarded as a subordinate principle. Value of service puts into the hands of the railways practically a power of taxation. It is indeed not entirely an arbitrary power, since the charges are partially regulated by water competition. But in its essence it is a power of taxation—a taxation often cunningly masked in the methods of classification and discrimination. From the public standpoint we maintain the great principle of equal treatment for all persons and all business. This is the general rule; the principle of value must be viewed as a legitimate qualification of the rule of equal treatment. But it must be shown in every particular case that the service is of varying value. From the public standpoint in other words the burden of proof must rest on the railways. Charging what the traffic will bear is just, but its application is so elastic that the justice must be demonstrated in each instance. To leave the application of the principle to the discretion of the railway results in the chaotic, almost barbaric, condition of actual charges during railway wars. The only rational method to reconcile public and private interests is to lay down the rule of equal treatment for all persons and places, and to admit the principle of value as a necessary infraction of the rule. But the necessity of the infraction must be shown before its legitimacy is accepted. The principle of differential rates is just; all differential rates are not just.

3. The Short-Haul Principle.

The question hence arises: How far are these differential rates allowable; to what extent should local discrimination be practised? We are confronted, in other words, by the problem of the long haul versus the short haul, the through traffic versus the local traffic. If we take a line with its two termini as competitive centres, and a third point intermediate between the two, and not subject to the same competition, we may have three principal forms of differential rates:

1. The rate per ton-mile from New York to Buffalo may be less than the rate per ton-mile from New York to the intermediate Rochester, and yet the aggregate charge to Buffalo may be greater than the aggregate charge to Rochester.

2. The rate per ton-mile from New York to Buffalo may more than cover mere movement expenses, and yet be so much less than the rate per ton-mile from New York to Rochester that the aggregate charge to Buffalo may be slightly less than the aggregate charge to Rochester.

3. The rate per ton-mile from New York to Buffalo may be so low that it will not even cover actual movement expenses, and the aggregate charge to Buffalo will be considerably less than the aggregate charge to Rochester.

The third case occasions but little embarrassment. Such a practice manifestly cannot be defended, even from the standpoint of sound railway practice. For new or through business, as we have seen, any rate above the additional cost of the new business is a paying rate. It is defensible on the theory of value, because

it contributes to the fixed expenses and thus diminishes the burden or rate on the old business. But if the rate falls below the expense of the additional business, it undoubtedly becomes a losing rate. It contributes nothing to fixed expenses, but actually requires an additional charge on the old business to make good the fixed expenses. The justification of differential rates thus entirely falls away. No theory of value can require one shipment to be charged unduly high rates in order to transport another shipment at less than actual cost. This would carry the principle of compensation beyond all reasonable bounds. The only possible exception from the railway standpoint would be to reduce rates temporarily below cost of service in order to build up a certain locality, and thus ultimately develop paying traffic. The present loss may create a future gain. But from the public standpoint this would be inadmissible. To raise local rates in order to decrease rates to competitive points below the additional cost of the new business is theoretically indefensible. The minimum rate should never fall below the movement expenses. Any differential rate below this point is illegitimate, and, we may add, comparatively rare, because disastrous to the railway.

We come to the second case, where a higher aggregate charge is made for the short haul than for the long haul. At first blush such a practice seems a flagrant offence. We are tempted to exclaim: This inverts the natural order of things; it must be stopped at all hazards. But the matter is not quite so simple.

It is maintained that lower charges on short hauls remove the geographical advantages of localities and, since the termini of a road are generally larger cities, tend unduly to increase the advantages of the large as against the small places. The same argument, however, is applicable, although in a slighter degree, to any differential rates. They all discriminate against some localities in favor of others. For the purposes of the argument we may treat all differential rates together.

It may indeed be confessed that differential rates do sometimes remove geographical advantages. But it does not follow that such a practice is always reprehensible. There is no such thing as a natural, inviolable geographical advantage. There are no vested rights in situation. One town may be connected

with the coast only by a turnpike; another town further distant may have the good fortune to see a railway built through its limits. Has the former any cause to complain because it is robbed of the benefits of its hitherto advantageous situation? A village ten miles distant from a metropolis has been supplying it with garden-produce. Is there any essential injustice in allowing villages forty or fifty miles distant from competing for the same market—a competition possible only through differential rates? In fact, the object of all improved means of transportation is to annihilate distance, to minimize the differences of situation. Maintenance of original differences of situation implies equal mileage rates. It would render impossible all but local business in the vast mass of commodities; it would again turn our western fields into barren wastes. Differential rates widen the field of supply; they increase the specialization of wants, and create the possibility of satisfying these wants, so characteristic of modern industrial society. Opposition to local discrimination arises from viewing solely the interests of the producer; rational economics lead us to consider also the consumer. Opposition to differential rates is based on the supposed welfare of a particular class or section of producers; a wise national economy will ponder over the interests of the whole community, over the prosperity of the entire country. irrespective of sectional jealousies. If differential rates are so arranged that distant producers are enabled to compete with local producers, the latter indeed may see their profits curtailed, but the former will see their profits increased, and the consuming public as a whole will evidently gain. There is no absolute proprietary right in the situation.

The charge, again, that differential rates increase the advantages of large cities may be admitted, but without any necessary imputation of injustice. It may be urged that differential rates do not at all differ from preferential rates; that all personal discriminations are wrong because they increase the advantages of the large shipper, and that all local discriminations are wrong because they increase the advantages of the

¹ Cf. the recent complaints of California producers and manufacturers at being shut out of Eastern markets by the operation of the Interstate Commerce act.

large city. But such an analogy is essentially defective. Two or more shippers have a positive right to equal treatment. A common carrier must not assume the privilege of deciding between them. The common law and common justice demand equality of treatment for similar services. But in the case of localities there is no such indefeasible right. Differential rates which increase the advantages of large cities are due simply to the fact that these cities are competitive centres. The discrimination is the result of the competition. To avoid the discrimination, we must avert the competition, whether by rail or water. The building of an additional line temporarily increases the advantages of the terminus,1 for every new railway alters in some degree the relative advantages of situation. The local points simply pay the penalty of not being competitive points, and to accord all local points the same benefits as competitive points would be to invert the normal development. Differential rates in such cases maintain the natural advantages of situation, while pro rata charges would here invert the geographical advantages. Equality between persons is rightfully demanded because the services are similar; equality between places is not always necessary, because the services are sometimes dissimilar. The ability of long-distance freight to bear the charges diminishes faster than the distance increases.2

But of course this view does not justify all differential rates. The abuses have often been outrageous, the methods undeserving of palliation. Local interests have been disregarded, and the discriminations so conducted as to ruin whole businesses or towns in order to build up others. It is not necessary to ascribe

¹Temporarily, *i.e.*, until some combination is effected between the rival lines; and such a combination is sure to ensue in the shape of a pool, an arrangement, or a consolidation. If there is water or foreign competition, the effect may be permanent instead of temporary.

The English courts at first interpreted Cardwell's Traffic act of 1854 in the above sense. The clause reads: "No company shall make or give any undue or unreasonable preference or advantage to, or in favor of, any particular person or company, or any particular description of traffic in any respect whatsoever." The courts held that this demand for equality of treatment applies only to persons; but that nothing prevents the railways from favoring one class of traders, or one town, or one portion of their traffic, provided the conditions are the same for all persons, and for the benefit of the railway. See the decisions in Shelford, Law of Railways, (4th ed.), i, 166-174. Cf. also the English Parliamentary Report for 1872 (Joint Select Committee on Railway Companies Amalgamation), p. xiii.

illicit motives to the railway managers, although even such examples have not been wanting in our history. They have often been forced into unjust discrimination by the stress of competition and the instinct of self-preservation. But railway officials commit a great mistake in calling all local discriminations just because they are the effect of competition, precisely as the demagogues err in opposing undeniably valid discriminations and at the same time upholding competition. Competition is made to cover a multitude of sins. From the standpoint of railway profits, all actual differential rates, unless where railways carry at less than hauling expenses, may indeed be defensible; but from the public standpoint of national prosperity and the equable development of all sections, many of them may easily be convicted of injustice.1 Railway profits and public interests do not always go hand in hand. The possible diversity of interest renders some form of governmental supervision imperative. Untrammelled liberty has been tried in the balance and found wanting. Private actions which so materially affect public interests must be subject to review and correction at the hands of some public authority.

The main limitation on the practice of differential rates hitherto has been the enactment of short-haul laws.

The short-haul system admits differential rates, but prescribes that the aggregate charge to any intermediate point shall not exceed the aggregate charge to the final point: the entire distance must never be charged less than any part of it. As a principle, this is in itself legitimate. It tends to check the undue extension of the practice of differential rates. For although, as we have seen, there is no vested interest in geographical advantages, it becomes an anomaly to charge to a way-station the rate

¹Thus Alexander, Railway Practice, 1887, p. 14, says: "The competition which gives birth to such discriminations determines also their sizes, or the extent to which they must go. What are the rates to intermediate points has nothing to do with the case." Expressed in this general way, the principle is manifestly indefensible, for it would justify transportation to competitive centres at less than actual hauling expenses. It must be remembered that railway profits are no excuse for injustice to the public. So Fink, Argument before Senate Committee on the Reagan Bill, 1879, p. 20, claims that competition would justify a charge of \$1.50 a ton from A to B, and of \$3.00 from A to an intermediate point, C. It is these exaggerated claims that arouse the ire of the public. For the claims of the railway antagonists in England, see Pope, Railway Rates and Radical Rule, 1884.

to a competing point further on, plus the additional rate from the competing point back to the way-station. This amounts, in fact, to making an extra charge for *not* transporting the goods to a more distant place.¹ Put in this way, the hardship is apparent. As a general rule, the short-haul principle should be followed.

But a categorical and absolute prohibition of charging more for the short haul would be of dubious value. If the law could be applied to all media of transportation, waterways as well as railways, foreign as well as home railways, then the matter would be simplified. But as long as such competition exists, the anomalies cannot be entirely removed. The attempt to do so by law would simply decrease the profits of the railway without improving the condition of the public. New York and New Orleans are connected by water as well as by rail. The railway charges cannot exceed the water rates by more than a definite amount, even though such charges only give a slight profit above movement expenses, and by no means cover the total cost of service. The charges to New Orleans are less than to an intermediate point, X. What would be the effect of a short-haul Rates to X would be lowered, or New Orleans rates would be increased. If rates to X are lowered, the profits of the railway may be seriously curtailed, and it is questionable whether it could defray its expenses at all. The railway will hence far prefer to raise the New Orleans rates, as on the whole less injurious. If New Orleans rates are raised, the water lines will take all the traffic, and the rates to X will have to be increased still more. For the railway will now have no New Orleans business to contribute to its fixed expenses, and will have to meet these by the proceeds of the local business alone. The local discrimination would hence be increased, for actual rates to New Orleans by water remain as before. No one will gain except the steamship company.

What is true of New Orleans is true of all points subject to water competition, or influenced through their connection by water competition. The same considerations apply to the competition of foreign railways. A short-haul law applicable to the United States but not to Canada would simply transfer the

¹Cf. Adams, Railroads, their Origin and Problems, 1879, p. 124.

profits of the American railways to the Canadian, without decreasing the local discriminations.

Here again the principle is correct, but the exact application a matter of difficulty. It is a conflict between railway profits and impartial justice. If the short-haul principle in any given case decreases profits, but not to such an extent as virtually to ruin or to handicap the railway, then it may safely be applied. In many cases the lowering of local rates would not have this baneful result, for the reason that the main traffic of the railway is the through traffic. This explains why many railways are now reducing their local charges. The short-haul principle will not materially affect their earnings. But in many other cases the above examples will hold good. The through rates will have to be advanced, and the railways will suffer without any benefits to the public, or, in fact, to any one but the rival transportation agencies. Both railway officials and railway antagonists are hence wrong. The demagogues are wrong because they fail to see the limitations of the short-haul principle; the railway officials are wrong because they set forth competition as a reason for all existing infractions of the principle. Competition becomes a valid reason only where the short-haul system implies a necessary choice between ruinous curtailment of profits and complete loss of the business. The limit is an elastic one, and precisely on this account do we need some public authority to define the justice of the limit in each particular case. But an inflexible law. enforcing the short-haul principle in all cases, would be neither wise nor successful.

Prior to the enactment of the Interstate Commerce act, several states already had short-haul laws on the statute books. According to the Commutation of Tonnage act of 1861, a contract between the state of Pennsylvania and the Pennsylvania Railroad Company, the short-haul provision was agreed to. But neither this agreement nor the law of 1883, which incorporated the same principle, was ever thoroughly carried out. The Granger movement of 1870-1875 resulted in the passage of very stringent laws in the Western States, some of them being virtually pro rata laws. Many of the specifically short-haul laws, as

¹Cf. the testimony of Pennsylvania shippers in Cullom Rep., Test. (Norris), pp. 530-535, (Welsh) p. 460, (Wood) pp. 478-480.

that of 1873 in Ohio, remained dead letters, while the more stringent laws, which absolutely fixed rates or empowered the commissioners to fix rates, were enforced so literally as to produce a revulsion in public feeling and a speedy repeal of the laws.1 The same is true of the more recent short-haul laws in the North-west, as, e.g., the Doane law of 1881 in Nebraska. The railways enforced it so strictly by raising local rates that the public began to regard it as a burden, not a relief. As a result, the law is now practically a dead letter.2 Several of these laws were, however, something more than mere shorthaul laws. They provided, in general, that a shorter distance should not be charged more than a longer distance on the same line, while according to a true short-haul law the shorter distance must be included within the longer distance. This distinction was well expressed in the Massachusetts law of 1874. which reads as follows:

No railroad corporation shall charge or receive for the transportation of freight to any station on its road a greater sum than is at the time charged or received for the transportation of the like class and quantity of freight from the same original point of departure to a station at a greater distance on its road in the same direction.3

But this law, as the phraseology denotes, applies only to hauls from a terminus to the way-stations. It does not apply in the other direction, i.e., from the way-stations to the terminus. Possibly on this account, but probably because of the smaller degree of competitive traffic in the state, it has been found possible to enforce the law strictly.4

The New York commission made a careful study of the principle in 1884. Their conclusion is expressed in these words: 5

Railroads should not as a general rule charge more between a terminal and an intermediate point, for a like class and quantity of freight, than is charged between such terminal and a more distant point, even though at such more distant point there may be railroad or water com-

¹ So in Wisconsin, Iowa, Michigan, Minnesota.

Cullom Committee Report, Test. (Rosewater), pp. 1133-34. Public Statutes, chap. 112, § 190.

^{*}Railroad Commissioners' Report, 1885, and 1886, p. 35, in re Housatonic Railroad Co. See also Cullom Rep., Test. (Russell), p. 305.

*Report on the Pro Rata Bill, 1884, p. 120.

petition, unless railroads can affirmatively establish such circumstances governing such competition as justify the higher charge for the shorter distance.

This is a conservative and judicious conclusion, which shuts out on the one hand the extravagant claims of the railway officials, and on the other the short-sighted demands of the professional reformers. Each case must be judged on its own merits. Thus in Moon vs. The New York, Ontario and Western, competition with a rival railway was held not sufficient to justify the infraction of the principle. In Foot et al vs. The Utica and Black River, twas held that higher charges might sometimes be made to intermediate points, but that the peculiar circumstances were not sufficient in this case. In Harding and Hollis vs. Rome, Watertown, and Oswego, water competition, which would have given the business to foreign companies, was held to be a valid reason for the infraction of the rule. The shorthaul principle as administered in New York is thus no hard and fast rule.

European experience all tends to the same result. In France the short-haul principle is known as the clause des stations non denommées, and has been in force since 1864. The railway tariffs must be submitted to the administration, and in virtue of this power of approval or homologation, the government has procured the insertion and maintenance of the short-haul principle.4 But this is applicable only to the general tariffs, and is enforceable there because of the almost utter absence of interior competition—a fact due to the existence of territorialization or division of the field among the separate companies. The principle is not applicable to any case where there is any danger of foreign competition. The tarifs de transit, or through tariffs for goods passing through France on the way to another state, and the tarifs d'exportation, or through rates for goods destined for exportation, are exempted from the application of the principle, so that greater charges are permitted to intermediate

¹ N. Y. Railroad Commissioners' Report 1885, pp. 73-76.

² Report 1884, pp. 94-131, especially pp. 106 and 119.

³ Report, 1884, p. 160.

⁴Aucoc, Conférences sur le droit administratif, 2^{me} éd., 1882, iii, 748. Cf. Picard, Chemins de fer français, 1885, ii, 444; iii, 587.

points. This, it must be remembered, is allowed by public authority and in the public interest.¹

In Germany, where the railways are almost exclusively owned by the state governments, and interior competition thus minimized, there is likewise no hard and fast rule. The short-haul principle, or Princip der hintergelegenen Stationen, is accepted as a general rule in Prussia, but exceptions may be admitted by the minister of public works.2 The Bundesrath of the empire also enunciated the same principle, but expressly inserted the proviso that particular circumstances might justify an infraction of the rule.3 These exceptions are of frequent occurrence.4 The short-haul principle does not apply to through-transit rates, to import or export tariffs, or to any competitive centres where the competition is caused by waterways or foreign railways. After the purchase of the Prussian railways by the state a few years ago, the attempt was made to enforce the short-haul rule strictly, but it ignominiously failed.5 The Scehafen-Ausnahme-Tarif, and a large number of other special rates permit charges in derogation of the short-haul principle. Even the earnest defenders of state railways confess that numerous exceptions are indispensable.6

In Switzerland the short-haul principle is maintained in a recent report of the Diet, but exceptions are permitted in the case of foreign competition. In Austria the short-haul clause is inserted in many of the railway charters, but both in the state and in the private lines the exceptions are exceedingly numerous. In Belgium and Holland, where the laws, literally interpreted, enjoin mileage rates, the vast majority of actual

¹The accounts of European practice in the New York Commission Report on the Pro Rata Bill are inexact and untrustworthy.

² Cf. the ministerial rescripts in Krönig, Die Differentialtarife der Eisenbahnen.

³ Bundesrath, Sitzung vom 6. April, 1877.

^{4&}quot;Ziemlich häufig" is the phrase used by a prominent German official in a letter to me. The matter is decided in every case "auf Grund der jedesmal vorliegenden tatsächlichen Verhältnisse."

⁸ Cf. especially the test. of Forbes in English Select Committee Rep., 1882. Evid. 169 et scq.

⁶ Ulrich, Eisenbahn-Tarifwesen, 1886, pp. 150-152.

⁷ Bericht des Bundesrathes an die Bundesversammlung, Nov. 23, 1883; in Hürlimann, Die eidgenössische Eisenbahngesetzgebung, 1887.

^{*}Schreiber, Das Tarifwesen der Eisenbahnen, 1884, pp. 181, 191, 199. Cf. Nördling, Die Selbstkosten des Eisenbahntransports, 1885, p. 219.

charges are arranged according to special rates, many of which permit greater charges for the shorter distances.¹ In Italy similar special rates may be approved by the government.² Thus in no country where the tariffs are fixed by the state or subject to public control is the short-haul principle an absolute rule.

In England, indeed, the short-haul principle has been affirmed by the courts,3 and the railway commission has of late gone even further in its opposition to differential rates. In the celebrated Broughton and Plas Power Coal Company case it was held that the charge for the longer distance must not only be greater than for the shorter distance, but must actually more than suffice to cover the total cost of the extra service.4 But these decisions have had very little influence on the actual arrangements of tariffs in Great Britain, and have been severely criticized in the parliamentary commissions.5 The decisions, moreover, are by no means uniform, and in a very recent case it was held by the court that differential rates are perfectly legitimate if in the one case the rate is a local rate, and in the other simply a portion of a through rate.6 It is not "under substantially similar circumstances." Lord Stanley's bill of 1887 in fact expressly provides that the justice of differential rates should be measured by the necessity of securing the traffic.7

We are thus prepared to pass an opinion on the Interstate Commerce law. The short-haul clause reads as follows:

That it shall be unlawful for any common carrier subject to the provisions of this act to charge or receive any greater compensation in the aggregate for the transportation of passengers or of like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direc-

¹ Jacqmin, Étude sur les chemins de fer des Pays-bas, 1882, p. 87; Nicolai, Les chemins de fer de l'État en Belgique, 1885, p. 29.

Agreements of 1885 with the Mediterranean lines, cap. 4, § 39, 44.

³ Uf. Budd vs. London and Northwestern Railway Co., 36 L. T. N. S. 802. This was a case of sea competition. The decision was opposed to the principle of the older decisions under Cardwell's act.

^{*}Railway Commission, Tenth Report, 1883.

⁵ Select Com., 1882, Evidence, pp. 71, 89; especially the celebrated cases of Evershed and the Denaby main.

⁶Hull, Barnaby and West Riding Junction Railway vs. Yorkshire and Derbyshire Coal Co.

Railway and Canal Traffic Bill, § 25, sec. 2.

tion, the shorter being included within the longer distance. . . . Provided, however, that upon application to the commission appointed under the provisions of this act, such common carrier may in special cases, after investigation by the commission, be authorized to charge less for longer than for shorter distances for the transportation of passengers or property; and the commission may, from time to time, prescribe the extent to which such designated common carrier may be relieved from the operation of this section of this act.

It is improbable that the commission will interpret the act in the sense that the words "under substantially similar circumstances and conditions" justify all existing differential rates due to competition. This would practically emasculate the law. But on the other hand an analysis of the principles of rates and the results of European experience have shown us that any attempt to apply the law in all cases would be ruinous. A strict enforcement of the short-haul clause would most certainly result in general discontent and a speedy repeal. The safety-valve consists in the discretion afforded to the commissioners, and upon them the success or failure of the law depends. The act is an expression of a correct principle, but the limitations of the principle are no less obvious. The country is to be congratulated on the legislative recognition of the rule; let us trust that there may be equal cause for congratulation on the official recognition of its limitations.

Our preliminary conclusion may now be formulated. Under a system of free competition among private railways the principle of value of service or charging what the traffic will bear is the only rational method, calculated to give the most efficient service and the greatest profits. But the existence or possibility of the abuse of power requires the restriction of this unlimited liberty in the public interest. The reconciliation of the railways and the public can take place only through the interposition of public authority. The public authority must lay down the rule of equal treatment as the fundamental doctrine, but must recognize the principle of value as a reason for departing from the doctrine in any individual case. Omission of either duty necessarily entails injustice or inefficiency. The short-haul clause is a partial recognition of the demand for equal treatment; the discretion given the commission is implicitly a partial recognition of the theory of value. The Interstate Commerce act thus

accepts the principle and concedes its limitations; in this respect at least it is a wise and judicious measure. For the commission to ignore the limitations in the attempt to realize the principle would be an act of consummate folly.¹

4. Competition and Monopoly.

Scarcely second in importance to the short-haul clause of the national law, is the section which prohibits pooling. What is the true significance of pooling? What will be the effect of the law? To give a correct answer to this question we must enter upon a consideration of competition in general.

Here we are immediately confronted by the two fundamental questions: Is free competition universally beneficent? Is free competition universally existent?

The doctrine of free competition is essentially a modern idea. As the basis of nineteenth century economics it was first formulated by the Physiocrats and Adam Smith. It is entirely foreign to ancient and mediæval conceptions. The economy of the Middle Ages was founded on the idea of reasonable, customary price—the justum pretium of the legists, theologians, and statesmen. The institutions were based on restrictions, privileges, and enforced monopolies, while the legislative prohibitions were not entirely the product of class selfishness but in part the recognized expression of an attempt to secure distributive justice. That the legislators finally overreached themselves and stifled all liberty by their multifarious restrictions is a well-

¹That this confidence was not misplaced is shown by the leading decision rendered a few months after the above discussion was published and which held that "the prohibition in the fourth section against a greater charge for a shorter than for a longer distance . . . is limited to cases in which the circumstances and conditions are substantially similar. . . . The existence of actual competition . . . may make out the dissimilar circumstances and conditions . . . in the following cases:

^{1.} When the competition is with carriers by water which are not subject to the provisions of the statute.

^{2.} When the competition is with foreign or other railroads which are not subject to the provisions of the statute.

^{3.} In rare and peculiar cases of competition between railroads which are subject to the statute, where a strict application of the general rule of the statute would be destructive of legitimate competition.

The fact that long-haul traffic will only bear certain rates is no reason for carrying it for less than cost at the expense of other traffic."—In re The Louisville & Nashville R.R. Co. et al., pp. 27-29.

known fact. The necessary and salutary reaction found its theoretic justification in the "natural law" tenets of the eighteenth century, and a partial realization of those tenets followed in the first half of the nineteenth century. The idea now became current that a reign of free competition and its logical correlative, absolute laissez faire, would bring about a harmony of interests, a state of universal bliss. The enthusiasm of Bastiat and McCulloch was natural in seeing the world break away from the shackles of mediæval restraint. But recent experience has demonstrated the falsity of their anticipations and has disclosed serious defects in the régime of free competition. It does not always work evenly; it often secures undue advantages to the unscrupulous; it has given birth to great abuses in the factory system and the fraudulent speculation of modern society. The law of competition is not always beneficent.

Furthermore, it does not exist universally. The doctrine depends on the postulates of absolute transferability of labor and capital. But this assumption is approximately true in only a few instances, absolutely untrue in many instances. In the industrial undertakings of the present day the capital invested is often fixed, not circulating, capital, and cannot easily be transferred to a more lucrative business. It is difficult to gauge even approximately the superior profitableness of some competitive enterprise; and even when it has been gauged, it is still more difficult at once to transfer the capital. In fact, in only one department of business life does the doctrine of the absolute play of free competition hold good—in the stock exchange of modern times.¹

John Stuart Mill long ago called attention to what we may term economic or industrial monopolies, where competition is neither illegal nor absolutely shut out by nature, but where it is shown to be practically undesirable and utterly inefficient, thus of itself giving place to some form of monopoly.² Other writers, and especially Farrer,³ have attempted to analyze these

¹This explains, as Cohn pointed out, why Ricardo, who was a stock-exchange broker, first successfully elaborated the theory of free competition. Untersuchungen über die Englische Eisenbahnpolitik, vol. ii, 1875, p. 384.

²Book v. ch. vi. § 11. Appletorie ed 1880 vol. ii, p. 584.

³ Book v, ch. xi, § 11; Appleton's ed. 1880, vol. ii, p. 584. ³ Cf. Industrial Monopolies, Quarterly Review, October, 1870. Also Sax, Die Verkehrsmittel, i, p. 66 et seq., and Simon Sterne, "Monopolies," Lator's Cyclopædia of Political Science, vol. ii.

phenomena and to show why the law of competition is not applicable. Certain characteristics are common to them all. The industry demands a large amount of capital; it supplies a necessary of life; the article furnished is local; the industry occupies a peculiarly favoured situation; the method of operation requires unity and harmony of management; the production can be largely increased without a proportionate increase of capital. This is true not only of docks, waterworks and gasworks, but of all media of transportation—turnpikes, canals, telegraph, post and railways. In some of these competition has never been attempted; in most cases it has been tried, but has miserably failed. The disappearance of competition has benefited the companies and in many instances also the public. But at all events, whether beneficial or not, competition has disappeared, and combination and monopoly have resulted.

The chief consideration is the possibility of increased production without proportionate increase of plant or capital. To use a happy phrase, the business is subject to the law of increasing returns. The traffic on a railroad may be doubled without the necessity of duplicating roadbed, track, terminals and general expenses. Ten lines between New York and Albany would not benefit the public, and would certainly ruin each other. One line judiciously managed can perform all the work at far less cost. The railway is an economic monopoly; the inevitable tendency is toward fusion and single-headed management.

In addition to these economic monopolies proper, we find almost every department of wholesale trade at present taking the form of industrial combination. To maintain that prices are everywhere regulated by the free play of competition is no longer permissible. We cannot ignore the fact that producers find it to their interests to combine and to agree on certain prices less than which it shall be unlawful to ask or take. Adam Smith already said: "People of the same trade hardly meet together even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices." Even then the movement had begun; to-day it has become well-nigh universal. There is scarcely a trade

¹H. C. Adams, Relation of the State to Industrial Action, in Publications of the American Economic Association, vol. 2, 1887, p. 523.

throughout the land without its combinations,—many of which in the last few months have taken the impalpable form of trusts, in the endeavor to attain corporate advantages without assuming corporate responsibilities. There are really four classes: combinations to limit production, to regulate prices, to regulate distribution, to divide the field. Some comprise all four characteristics. To describe or enumerate them is needless in view of the recent discussions to which they have been subjected. But the facts exist. Prices are no longer always determined by the action of free competition, but often depend on the artificial manipulation of these industrial combinations or partial monopolies.

Are these combinations a necessary evil Are they an evil at all? Here it will be necessary to revise our natural opinion that monopoly is always injurious. This is as great a mistake as to affirm that competition is always beneficent. The characteristic feature of modern economy is that articles are produced not to satisfy any particular demand, but for the world market. Unregulated production, production uncontrolled by the state of the market, overproduction or mistaken production have brought about the modern commercial crises. A period of large profits alternating with a period of large losses, extremely low prices alternating with extremely high prices,—this has been the history of modern industry. It is a period of industrial anarchy.

Combinations are designed to put an end to this anarchy. They do away with the excessive fluctuations of prices, performing much the same function as legitimate speculation. Of course, in most cases, they have only their own profits in view; but is it true, as Adam Smith thought, that they are always a conspiracy against the public? A careful analysis must lead us to answer no. They better their own condition, but in so doing they often better the public condition. Steadiness of price is better than fitful fluctuations in price; regulation of production is better than the underproduction or overproduction which re-

¹Cf. J. B. Clark, "Limits of Competition" and F. H. Giddings, "Persistence of Competition," Political Science Quarterly, March, 1887, pp. 45, 62. Also the articles of H. D. Lloyd, North American Review, 1884 and 1885. For Europe, see Kleinwächter, Die Kartelle, 1883. For England, Select Committee on Railways, 1882, Evid. qu. 3893; 1881, Evid. qu. 16,376.

sults in crises; combination is preferable to "cut-throat" competition which ruins the producer without benefiting the public.

It is of course undeniable that there are possible or actual abuses connected with these combinations. But from this simply results the necessity of public control. We have the alternative: Leave the combinations alone or regulate them. There is no third method. We may prohibit them, but we cannot prevent them. If we make them illegal, we shall simply make them secret. We cannot prevent two men from agreeing not to compete with each other. Robert Stephenson truly said, in 1853: "Where combination is possible, competition is impossible." The whole trend of modern development is to substitute the large for the small, to put combination in the place of competition. We cannot stop the progress; we must recognize it.

The question thus arises: Shall we allow these associations to develop as they will, or is it the duty of the public to interpose its authority and to regulate what it cannot prevent? Put in these words, the answer seems plain. We must recognize the monopolies as existing facts but hold them under control. We have in general gone on the opposite theory. We have believed in the universal existence and beneficence of free competition; we have wilfully blinded our eyes to what was taking place about us; and to-day we wake up only to recognize the existence of these gigantic combinations. To legislate against them and to fall back on free competition would be absolutely futile. Competition has had its day and has proved ineffective. Let us be bold enough to look the facts straight in the face and not shrink from the logical conclusions of our premises. Recognize the combinations, but regulate them.

The application of all this to railways is plain. As a regulator of charges, competition between railways is even less effective than in other large occupations. The doctrine of transferability of capital, partially true elsewhere, is absolutely false here. The railway possesses all the elements of a practical monopoly. So obvious are the advantages of agreement and fusion, that whenever a railway system has started out with competition of

¹This phrase was coined not by George Stephenson, as Hadley, Railroad Transportation, p. 66, erroneously asserts, but by his son Robert. Cf. Report Select Committee on Railway and Canal Bills, 1853, Evid. qu. 885, 886, p. 92. This is a mistake almost universally made.

independent lines it has inevitably resulted in some form of combination. The public has profited no less than the companies. The curse of free trade in railways has been the system of parallel and often needless lines. An additional road between two terminal points frequently represents so much wasted capital, and the necessity of earning profits on this swollen capital simply aggravates the burden on the public. No more serious blunder has been made than to suppose that increased competition means increased facilities and lower charges. The competition, while it lasts, is of a desperate character, and each line strains itself to the utmost to obtain the business which is only sufficient for one. Charges indeed may be lowered temporarily, but the strenuous attempt to procure the traffic gives birth to the very worst abuses of railway management—secret personal discriminations and immoderate local discriminations. The changes are violent, the conditions unstable. Reduction of rates is sometimes carried to such a point that not even operating expenses are met, for the reckless and bankrupt roads feel no need of earning any fixed charges.

The railway wars, which are the logical and extreme manifestations of railway competition, thus exhaust the companies and afford but a dubious relief to the public. Lowness of charges is outweighed by the instability of charges. reduction itself is necessarily of an ephemeral character. Continuance of the rates means universal bankruptcy; escape from ruin is possible only through combination. The combination which results again raises rates, and the charges must now be sufficient to earn profits on the often increased capital of the two lines. If competition be beneficial to the public, it is a very temporary benefit; if railway wars, on the other hand, throw all trade into confusion and engender the most aggravated abuses, then the cessation of the competition is a boon to the public, even though the combination results in a relative increase of charges. And if this be true, then a railway policy which obviates the danger of railway wars and "cut-throat" competition can give the public not only stability of rates but also the additional advantage of relatively lower charges.

However the railways start out, they are sure to end in combination. It is the same development as in all other economic

monopolies, with the sole difference that the railway monopoly is more pronounced and the railway combinations more widespread. In no business are the effects of spasmodic competition more pernicious. It needs but slight acquaintance with the practical construction of railway rates to perceive the absolute interdependence of tariffs. A war between two important lines necessarily involves the interests of distant roads throughout the country. The only escape from ruin is the replacement of competition by some form of combination. No less than seven possible forms of arrangement have been successively tried:

- 1. Agreement to make equal rates or give equal facilities as to speed, accommodation, etc.
- 2. Agreement to forward traffic over each other's lines by working arrangements or traffic facilities.
 - 3. Agreement to divide the field.
 - 4. Agreement to divide the earnings.
 - 5. Agreement to divide the traffic.
 - 6. Agreement to lease.
 - 7. Agreement to consolidate.

Each successive arrangement presents more chances of stability and permanence than its predecessor.

The first two methods have their home principally in England, although they are characteristic of all early attempts to avert competition. The railways agree not only as to the charges, but also as to the speed and accommodations. Contracts to run an equal number of trains at the same speed and with similar facilities are extremely common. For a long time reliance was placed on the existence of competition in rates and in facilities, but at present both railway officials and railway antagonists have definitely abandoned all faith in the efficacy of both kinds of competition. Agreements as to rates, speed and accommodation are to-day the well-nigh universal rule.

¹Report Select Committee on Railways, 1882, Evid. qu. 2964 (Brown): "The days of competition are gone with railway companies." Ibid., qu. 3896: "It cannot be to the interest of [the railways or] the public to carry on such competitive traffic, as they must either agree or stop ultimately." Cf. as to non-competition in accommodations, etc., Joint Select Committee of 1872, Evid. (Farrer) qu. 7623, (Tyler) qu. 6893, 6914, (Wright) qu. 2548, (Scott) qu. 5384, etc.

It is plain, however, that new agreements to maintain rates or to afford facilities are difficult to enforce in the face of serious temptation to cut rates or to underbid a rival company. The difficulty grows in proportion to the number of originally competitive lines. Hence in the United States, where the facility of constructing new competitive roads is practically unlimited, these methods, although often tried, have proved ineffectual to prevent railway wars with the consequent abuses of fluctuations and injustice to the public. It was necessary to devise some other escape from competition.

The third method, that of division of the field, was naturally impracticable as long as any such plan might immediately be frustrated by the construction of a new line to invade the field. Some countries indeed, which foresaw the weakness of competition from the very outset, adopted this method, technically called the principle of territorialization. Thus France parcelled out her territory among a small number of railways, principally radiating from Paris as a centre. The six "great companies" which control the transportation facilities are the direct product of the governmental policy. To use Mr. Chadwick's phrase, it is a system of competition for the field, not of competition in the field, i.e., the stage of competition is removed to the period anterior to construction. In other words, the charters were granted to the highest bidders, to those companies which agreed to the conditions most favorable for the state. This system, however, proved defective in a double manner. In the first place, the rivalry between the corporations to obtain the coveted charters resulted in the assumption, by the successful competitors, of such unduly heavy burdens that after a short time they were confronted by the prospect of speedy ruin, until the state was compelled to interfere and to lighten the burdens, thus abandoning the advantages that had been secured. In the second place, the almost absolute immunity from competition by new lines rendered the railways careless and disinclined to undertake im-

²Chadwick, "Results of Different Principles of Legislation and Administration in Europe," Journal of the Statistical Society, vol. 22 (1859), pp. 381-420, esp. p. 385.

¹The arrangement made by the Saratoga conference of 1874 is the first example of such an agreement between the trunk lines. As to Western agreements between "honourable" roads at present, cf. Cullon Committee Rep., Test., p. 728.

provements. While the French system, therefore, avoided in great measure railway wars and personal discriminations, it gave rise to serious complaints of extortionate charges and insufficient facilities-complaints which the recent agreements between the railways and the state are attempting to remedy.1

In those countries, however, where the original policy was that of unrestricted competition, the trend toward combination has also taken this form of territorialization. In England it is known as the districting system or district amalgamation, the chief examples being those of the North Eastern and Great Eastern railway companies.2 The project has often been broached of enforcing a more systematic districting in the future; but the select committee of 1872 showed that such a plan was still impracticable, and enlarged on the inexpediency of conceding a full legal monopoly to the "districted" combinations.3 In the United States there have been sporadic examples of the division of the field, where the separate parties to the combination agree not to trench upon each other's territory; but the immense number of competitive lines has rendered arrangements of this kind for the most part illusory.

5. Railway Pools.

The next and most common step in the development of combination is the growth of the fourth and fifth forms-division of the traffic or the earnings. These are technically known as pools,-traffic pools and money pools,4-and it is against them that the fulminations of the Interstate Commerce law are directed. There is, perhaps, no single institution more commonly or more grievously misunderstood. For the odium that it has incurred the name itself is in part responsible. "Pooling" savors of a gambling transaction, of a wager or speculation; it immediately recalls to mind the "blind pools" of Wall Street notoriety, the accompaniments of games of chance. But railway pools are

¹ Thoviste, Étude sur les conventions financières conclues entre l'État et les compagnies de chemins de fer, 1886, pp. 121-124, 164-170.

2 Joint Select Committee of 1872 on Railway Companies' Amalgamation,

Evid. qu. 3660 et seq.

Report, pp. xl-xlii. Cf. Evid. (Farrer) qu. 7679, (Price) qu. 3815, etc. [Territorialization or division of the field was finally accomplished in Great Britain in 1920.]

Or "cash" pools.

of an entirely different nature. They are simply an attempt to escape the evils of an unrestricted competition while retaining all of its essential advantages.

The first great benefit of all pooling machinery is a greater stability of charges. Continual and sudden fluctuations in rates are regarded by shippers as even worse than extortionate rates. Momentary and unexpected changes throw all business into confusion. Yet before the formation of pools these fluctuations were enormous. Let us take as an example the traffic between Chicago and New York, which received an immense impetus several years after the close of the war and the formation of the trunk lines. In 1869 the through tariffs from New York to Chicago changed twenty times during the year; in 1870, eleven times; in 1871, nine times; in 1875, five times.2 Not a year passed without frequent and often enormous fluctuations; e.g., sudden changes from \$1.88 to 40 cents per hundred and then back again. Yet after the formation of the trunk line pools of 1877-8. which were subsequently strengthened by the joint executive committee of 1879, there were for more than three and a half years no changes at all.3 The manifest gain to the public in this increased steadiness of rates needs no further elucidation. Without the machinery devised for the Southern Railway and Steamship Association in 1875 by Mr. Albert Fink, and extended by him to the trunk lines in 1877, this stability of rates would have been infinitely more difficult of accomplishment.

Secondly, not only do the pools succeed in obtaining a greater stability of the published tariffs, but they also tend to maintain actual charges to the level of the published tariffs by abating "rate-cutting," whether secret or open. It is conceded that personal discriminations or preferential rates form the chief abuse of our railway management. These special favours may indeed be cloaked under a variety of disguises,—such as underweighing

¹ Cf. in general, Cooley, Popular and Legal Aspects of Traffic-pooling, 1884; Simon Sterne, Railroad Poolings and Discriminations, 1879; Blanchard, Traffic Unity, 1884; Pierson, The Passenger Pool, 1884; Fink, The Railroad Problem and Its Solution, 1880.

² Fink, Statistics Regarding the Movement of Eastbound and Westbound Traffic over the Trunk Lines and Connecting Roads, 1884, p. 39, comprising all changes from 1862 to 1884.

^e From Feb. 15, 1878, to Aug. 6, 1881. Hudson, *The Railways and the Public*, 218, does not allude to these facts. His exposition is worse than inaccurate. It is so misleading as to be positively mischlevous.

or underbilling, Christmas gifts, and other arrangements whose exact tenor is known only to the freight manager and the individual shipper,—for the forms of personal preferences are limited only by the ingenuity of the railway officials. But secret rebates of this kind cannot be entirely prevented by any method, whether legal prohibition or voluntary agreement, as long as they remain secret. The sole remedy lies in complete publicity and in removing as much as possible the temptation to cut rates. This the pooling system accomplishes with a fair degree of success, since the earnings of the railways are divided in fixed proportions irrespective of the traffic actually carried. The more effectual the pool and the more stringent the penalties for infraction of the agreement, the greater the chances for maintenance of rates.

To object to pools because they have not entirely attained their object—that of maintaining rates—is an argument of but little cogency. The most candid observers, even among those who at the outset opposed all forms of monopoly, admit that the situation has been materially improved since the existence of railway pools. Such gross and palpable discriminations as those which built up the Standard Oil Company would have been impossible under the late system of complete trunk line pools.² Preferential rates to-day in the district covered by the pooling systems are immeasurably less, both in number and extent, than ten years ago. The pressure exerted upon recalcitrant members is always stronger in a pool than in a mere agreement to maintain rates. If pools have not been entirely successful in preventing discriminations and railways wars, it is owing solely to lack of sufficiently coercive powers in the executive as well as to the fact that the pools are to a great extent beyond the law. The non-maintenance of rates is a violation of the pool, not a result of the pool. But if it be granted that pools do exert a beneficial influence in preventing preferential rates, then the surest method of augmenting this influence lies in strengthening the pools with their compulsory powers, not in

*United States Senate Committee on Labor and Education, 1883, Test.,

vol. ii, p. 517.

¹Cf. Simon Sterne, The Railway Question, 1885, pp. 22-27, and in Cullom Report Test., pp. 71-77, as compared with his views in Report on the Internal Commerce of the United States, 1879.

abrogating them. The railway officials themselves have finally become conscious of this truth, and during the past few years we have had the singular spectacle of railway magnates demanding governmental interference with the railways in order to legalize, enforce, and regulate the pooling contracts. That such a step would be advantageous to the corporations is now substantially admitted; that it would be no less advantageous to the public is a fact which is only beginning to dawn on the public mind.¹

The early pools were mainly "money pools." Thus the Chicago and Omaha pool of 1870 was based simply on the principle of a division of the total earnings after the deduction of a fixed percentage retained by each of the three roads as representing its expenses. But this arrangement was a manifest temptation to the individual lines to cut rates, to increase the competitive business, and thus to deduct a larger share to cover the increased expenses. Hence in 1874 the arrangement was modified so as no longer to allow deductions for expenses. The combination thus became, with a few minor exceptions, a "gross money" pool instead of a "net money" pool.2 In the Southern Railway and Steamship Association of 1875 the pooling policy was only one of the features of the combination, it being in other respects a forerunner of the "traffic associations," whose object is to facilitate the transaction of business, to provide proper means of amicably adjusting all differences, and collectively and promptly to enforce all agreements. Pools and traffic associations are of course entirely independent of each other; a pooling arrangement may be, and frequently is, one of the features of the traffic association, but there is no necessary connection between them. The one may and does exist without the other. In the association devised by Mr. Fink, with its elaborate machinery of executive officers, general commissioner, board of arbitration, etc., the word pool is not mentioned at all. It was simply an attempt to substitute organized and harmonious action for the chaotic confusion and internecine rivalry between the south-

¹A fact obscured by such thoroughly partisan and unscientific works as that of Mr. Hudson.

Report on the Internal Commerce of the United States, 1879.

ern railways.¹ Pooling arrangements were subsequently adopted, but only as a subordinate and entirely incidental feature of the general project. The contract provided for a net money pool, but with a comparatively small deduction for expenses.² The supplementary agreement of 1877 sought to increase the cohesiveness of the pool by providing for a penalty fund ³ deposited by each road with the commissioner as a pledge of good faith, and forfeitable upon proven infraction of the agreement.

When the Westbound Trunk Line pool was formed by Mr. Fink in 1877 after a protracted and desperate war, the policy of dividing the business instead of the earnings was carried into effect. It was a "traffic pool" instead of a money pool, and was further developed in the joint executive agreement of 1879. The joint agent was invested with the duty of making the weekly accounts and of specifying the roads which had carried less than their agreed percentage; and such roads were bound promptly to restore the balance by removing from the other companies their excess.4 This was known as the "equalizing of freight" or "diversion of traffic." In the new agreement of 1882 the payment of money balances or settlements in net earnings was introduced, and for two years no transfers of tonnage were made.⁵ But to some extent the practice reappeared, and caused so much dissatisfaction among the shippers that in the agreement of 1885 it was definitely discarded and provision made for the prompt payment of money balances by preliminary deposits to the credit of certain trustees.6 Since October, 1884, settlements moreover were made in gross, not net, earnings. In the division of the eastbound dead freight and live-stock traffic, as well as among the other associations throughout the country, this method of settlement had become the general rule. So

⁶ Contract between the trunk lines, Nov. 6, 1885, arts. x-xiii; reprinted in Cullom Com. Rep., App., pp. 237-244.

¹ Proceedings of the Convention of the Southern Railway and Steamship Assoc. at Atlanta, Ga., Sept. 6, 17, 1875, pp. 11-17 (letter of Fink), 1-9 (agreement).

²Report on Internal Commerce of the United States, 1876. Part ii contains a reprint of the agreements.

²⁰ per cent of the amount received on all joint business transacted,

^{*}Of. the contract in Hepburn Committee Report, Exhibits, p. 63.
*Of. statistics in Fink, Letter in Relation to the Diversion of Freight,

Exhibit No. 3, Third Report of Board of Railroad Commissioners of New York, 1885, p. 120.

accurately were the percentages allotted, that the amount of money balances was phenomenally small, in some cases amounting to less than one per mill of the gross revenue.¹ This is a fact commonly overlooked, but which reflects the greatest possible credit on the organizers of the traffic arrangements.

The idea that pools are a product of American ingenuity is most erroneous. The present form of railway federation or traffic association is indeed peculiar to America and represents the life-long work of Albert Fink, but the pooling arrangements are only ancillary features. Pools are not new. Europe learned the futility and inexpediency of opposing pools many years ago. They have been found to be the surest means of preventing unjust discriminations. In England they are known as "joint purse" arrangements, and generally take the form of money

¹In the Southern Railway and Steamship Association from 1876 to 1886, gross earnings were \$82,000,000; total money balances, \$461,295, or 0.56 per cent. The following interesting figures relative to the trunk lines have never been published, but rest on official authority, and have been inspected by the present writer. The details for each road are for obvious reasons omitted.

	Tonnage	Gross	Revenue	Per
	Carried.	Revenue.	Balances.	Cent.
Westbound, 1877 to 1886.	8,984,294	\$36,356,163	\$482,537	1.32
Eastbound, 1882 to 1885.	30,423,749	65,133,997	272,015	0.41
Boston and New England, Live Stock, 1882 to 1886 All divisions, 1877 to 1886	1,347,407	3,377,487 129,530,377	23,072 1,200,729	0.68 0.9

We add a few examples, without mentioning the exact date or species of traffic:

Railroad.	Total Receipts.	Balances.	Per Cent.
Baltimore and Ohio	3,861,364	\$105 rec'd 612 paid 47,657 paid	0.1 0.016 0.25

The balances paid by the different companies which carried in excess of their allotments were on the total traffic:

New York Central	14/100	of 1 ce	ent per	100	pounds.
Pennsylvania	25/100	44	44	66	46
Grand Trunk	11/100	44	46	44	46
Lackawanna	19/100	44	66	44	46

pools because of the greater consolidation of the lines. Agreements to charge equal rates for competitive traffic have been much more uniformly observed in Great Britain than with us. and hence the more advanced arrangements for the division of traffic have not been so necessary. But joint-purse agreements are not at all uncommon.1 Many of them have been made under the express sanction of Parliament or the commission to which the power of approval has been delegated. The apportionments of traffic are moreover made for much longer periods than in the United States,—a fact ascribable to the comparative constancy of business and the settled character of commercial relations. Thus Gladstone allotted pooling percentages for a term of five years in 1851 and made a further award for fourteen years in 1857.2 In 1853 the manager of a single railway called attention to twenty-seven such pooling arrangements made by his own line within a very limited period, dividing the traffic in all salient points. The railways among themselves and the railways and canals are shown to form a "happy family." 3 It is simply an additional proof of Gladstone's statement that competition between railways is like a lovers' quarrel: breves inimicitiae, amicitiae sempiternae.4 The joint-fund arrangements are found in large numbers to-day, and the clearing house acts as the agent of the interested parties, in this respect very much like the general commissioners of our traffic associations.⁵ In Eng-

¹ As an example at present cf. the lines at Preston, Scient Com., 1881, qu. 12,050.

²The first pool was between the Great Northern, the London and North Western, and the Midland railways; the second between the same and the Manchester, Sheffield and Lincolnshire. Parliament has sanctioned pools between the South Eastern and the London, Chatham and Dover railways; and also between the London, Brighton and South Coast and the South Eastern companies.

³ Rep. Sel. Com. on Railway and Canal Bills, 1853, Evid. (Huish) qu. 120-310.

^{*}Speech on bill of 1844 (Hansard, vol. 76, pp. 480-509). Gladstone adds: "I would no more trust the railway proprietors on railway matters than I would Gracchus speaking of sedition. I know of nothing more chilling than the hope which railway directors hold out from competition." The whole speech may be found in full in Galt, Railway Reform, Its Importance and Practicability Considered, 1864, App. 254-266. Galt's book itself is a highly fanciful plea for uniform cheap charges, based on Rowland Hill's postal reform. The first edition was published in 1843, and demands state purchase.

⁸ Rep. Joint Select Committee on Railway Companies' Amalgamation 1872. Evid. (Dawson) qu. 5571-2. The clearing house does not fix the percentages as did our pool commissioners.

land, while Parliament may still disclose a certain jealousy of the working arrangements of this kind, it does not think of prohibiting them; it simply makes them subject to governmental regulation. The wisest thinkers, even among those who cannot be deemed by any means apologists of the railways, confess that some of the present abuses may be obviated by a more intimate fusion of interests in this direction.¹

On the continent pooling arrangements are carried out to a much greater extent, and personal discriminations are hence correspondingly less frequent. In Germany they are known as Kartellen or Instradirungs-verträge.2 Owing to the greater complexity of the lines and the lesser degree of consolidation, they generally take the form of traffic pools. One important example of a money pool was the great German-Austrian union (Deutschoesterreichischer Verband), an international association from 1868 to 1873. But this was finally abandoned on account of the difficulty of making the exact allotments, it being not a gross-money pool as in England or with us, but a net-money pool with deduction for expenses.3 Since the railways have been almost entirely purchased by the state in Prussia, the necessity for pools has diminished, but the rivalry between the various state systems is so intense that a series of interstate pools has sprung up. In order to facilitate the execution of these agreements it has even been provided that the shipper shall no longer have the right to select the route by which his goods are to be transported.4 The railways ship the goods as they please, the sole condition being that the freight is to be carried by the cheapest or otherwise most favourable line. Not only are the pools effectually enforced between the state railways themselves but also, when there is any danger of serious competition, between

¹ Sir B. Samuelson, Report on Railway Goods Tariffs, 1886, p. 22. That the railway men favour this plan is of course obvious; cf. Grierson, Railway Rates, 1886, sec. xvi.

² Or Instradirungs-vereinbarungen.

³ Reitzenstein, Ueber einige Verwaltungseinrichtungen und das Tarifwesen auf den Eisenbahnen Englands, pp. 152 et seq. This contains a comparison of the English and German pools. For other cases, see Ulrich, Das Eisenbahntarifwesen, § 63.

⁴The sole exception is in case of goods subject to customs duties; Beschluss des Bundesraths, March 12, 1885, which changes § 50 of the Betriebsreglement. Cf. also Endemann, Das Recht der Eisenbahnen, 1886, Fünfter Abschnitt.

the railways and the waterways, including both canal and river traffic. In the allotment of percentages, moreover, the shortest line is not taken as the basis, but the shorter road is deemed equal to the longer road only up to twenty per cent of the longer distance.¹ The pooling arrangements in Germany have been of signal service in simplifying and equalizing the charges, which prior to their introduction were of the most complicated and often outrageously unjust character; and to-day they still perform the most valuable services in international traffic. No one any longer thinks of opposing them in principle.²

In Austria, where the state and private railways exist side by side, money and traffic pools are of daily occurrence. No sooner is a new route opened than it receives its share of the competitive traffic, and is thus deprived of any pretext to undertake a railway war. It may be declared that all competitive traffic in Austria is strictly pooled.3 The state railways themselves divide earnings or traffic with the water routes, and are thus able to avoid crying discriminations. In Belgium, where one large private company, the Grand Central Belge, has been the most formidable potential competitor of the state railways, the government has concluded a pooling agreement for the strict division of all competitive traffic. The line over which the shipment is made receives all the frais fixes, or terminal charges, as well as one-half of the frais variables, or movement charges. The remainder is pooled in fixed percentages.4 The sad experience of railway wars and exorbitant discriminations in the past has long since convinced the government of the absolute necessity of some agreements with its private competitors. Just as competition in general pulls the best men down to the level of the most unscrupulous, so in the competition between the state and the

¹This is known as the doctrine of "virtual" or "computed" distances. Schreiber, Das Tarifwesen der Eisenbahnen, 245-249. It is somewhat similar to our "constructive mileage."

² Cf. von der Leyen, Die Nordamerikanischen Eisenbahnen, 1885, p. 296; "The European expert finds these arrangements entirely unobjectionable" ("findet in solchen Verbänden nichts Verwerfliches"). Cf. also Obermayer, Ueber Tarifverbande und Eisenbahnkartelle, 1879.

^a Sax, Die Verkehrsmittel, ii, p. 102. For full details as to a late instance (the Arlberg line), see The Railroad Gazette, 1884, p. 636.

^{*}According to the doctrine of "virtual distances." But if the longer line's mileage exceeds the other by more than 25 per cent, it receives nothing beyond the terminals and one-half of the movement charges.

private railways the government itself was compelled to descend to the methods of private companies and to practice discriminations of the most flagrant nature, in some cases going so far as to discriminate against its own property in the shape of canals. Until the state owns all the railways, such pools will be necessary and beneficial to all parties concerned.

In France the principle of territorialization from the very outset has materially lessened the need of pooling arrangements. If the division of the field were absolute, the division of traffic or earnings could not exist, for the same result would be attained in either way. In some few cases, however, the chief lines partially overlap each other and thus give rise to competitive centres; but the dangers of competition are immediately obviated by the formation of pools, which are recognized as perfectly legitimate.1 The state line itself has made such a compact with the Orleans company, in which the percentages depend to a certain extent on the differences of grade.2 France has no faith in railway competition. In Italy the railways are sharply divided into two networks, and there is no competition and hence no necessity for pools. All international traffic, however, is effectively pooled. In Holland, where the pooling policy is far less developed, the results of the competition between the railways, and especially the railways and waterways, have been so unsatisfactory and the discriminations so crying that the parliamentary commission of 1881-2 desired to seek refuge from the railway wars in universal consolidation, and would have advocated state purchase had it not been for financial difficulties. Mere legislative prohibition of discriminations they confessed to be futile, and therefore proposed to hasten the process of combination by furthering the consolidation of certain smaller lines, and by refusing charters to any new competing lines.3

All the European countries, therefore, inculcate the same les-

¹A prominent French official writes to us as to the existence of money pools between railways, and even between railways and canals: "Il en existe plusieurs exemples. C'est chose parfaitement admise." So, e.g., the Chemins de fer d'Ouest et d'Orleans.

² Convention de 1883 avec la Compagnie d'Orleans, art. 16, in Picard, Chemins de fer français, vol. 6, 1885, p. 396.

⁸Cf. the report itself (October, 1882). For an abstract, see Archiv für Eisenbahnwesen, 1883, pp. 587-590. Cf. Jacqmin, Chemins de fer des Paysbas, 2^{me} éd., p. 87.

son. Unjust discriminations and especially preferential rates are found in inverse ratio to the pools. Where the pools are legalized and most effective, as in Germany and Belgium, the abuses are least; where the pools are less frequent, as in England, the abuses are greater; where the pools are rare and ineffective, as in Holland, the abuses are scandalous. Experience is no less convincing than theory. As long as there is no complete consolidation we cannot prevent both pools and discriminations. We must choose between them. The full development of the one means the disappearance of the other. With an universal pool, we can stop all unjust discriminations produced by the stress of competition; with partial pools we can pro tanto abate the discriminations. Nothing will be gained by the attempt to stop pools. We may prohibit them, but cannot prevent them. And if they could be prevented, they would simply disappear for a time; the causes which rendered their existence necessary would reassert themselves, and in the long run prove invincible, with the only result that in the meantime the country would have been exposed to an intensification of the very evils which it was desired to suppress.

That there is a possible danger in pools is indeed not to be denied. The inference, however, is simply the necessity of effective public regulation. What the public fears is the temptation to impose exorbitant charges. The policy of avoiding competition from the outset on the continent of Europe has certainly had some influence in preventing so quick a reduction of charges as with us. But rates in this country are perhaps as low as can be reasonably desired. There is no serious complaint of extortion, and there is far less probability of extortionate charges here than in European countries, because of the exceptionally large amount of water competition in the United States. The gravamen of the complaints is discrimination, not extortion. There is no need of conjuring up phantom dangers. We are actually confronted by certain specific abuses, and it is a superficial policy to abolish the means of preventing these abuses because of the dim possibility of other abuses which do not exist.

One misconception more fatal than any yet discussed still remains. It is commonly supposed that pooling entirely prevents competition. This is a mistake. Pooling maintains the

advantages of a healthy competition and at the same time prevents the dangers of an utterly unrestricted or "cut-throat" competition. The mere agreement to divide traffic or earnings in certain percentages does not put a stop to all competition. Each of the various roads will still attempt to procure as much business as can possibly be obtained in a fair and open manner. If any line while maintaining the published rates is yet enabled to run above its allotted percentage, this surplus will justify the railway in demanding an increased percentage in the new allotment that is to be made at the expiration of the monthly or vearly pooling arrangement. The incentive to fair and healthy competition is not removed; each line will endeavor to vie with its rival in accommodations and facilities. But the temptation to take unfair advantages of its rivals is diminished, for an increase of traffic due to rebates or violations of the pooling agreement manifestly cannot justify a claim for increased percentages. A successful pool prevents railway wars with the accompanying discriminations, but does not prevent healthy emulation to attract business. It simply raises the plane of competition to a higher level.1

The abolition of pooling would in fact hasten the very result which it is desired to avoid. Division of the traffic and the earnings form, as we have seen, the fourth and fifth step in the progress of combination. The final steps are lease and absolute consolidation. The tendency to combination is irresistible; all endeavours to stem the current have been and will be futile.² If therefore pools, which still permit competition to a limited degree, be abolished, the process of complete consolidation, which utterly precludes competition, will be accelerated. Under the system of division of earnings, the weaker roads are still enabled

¹This is another of the points entirely overlooked by Hudson, The Railways and the Republic, p. 229.

²Cf. English Select Committee, 1872, p. xxvi: "While it is extremely doubtful to what extent the less complete forms of combination admit of competition, and what is the value of such competition, there can be little doubt, judging from the past, that they cannot be maintained as the ultimate forms, and are sure, whatever principles may be laid down by committees or commissions, to end in complete fusion. So much stronger is the power of wealth, self-interest, and united action on the part of the companies, acting each in its own case with clearness and decision, than that of any general principles by which committees and commissions have supposed that the public interest might be protected."

to procure a share of the business and thus to maintain a limited competition; remove the guarantee of allotted percentages, and it is simply a question of time before the weaker roads are driven to the wall and then bought out by their more sturdy competitors. No clause in the Interstate Commerce act prohibits the stronger line from lowering its charges and thus inaugurating a war of rates, provided it be done publicly. The enforced publicity of charges is undoubtedly an immense step in advance; but while no increase of charges can be made until after ten days' public notice, reductions in the charges may take place without previous public notice.1 Railway wars are hence by no means prevented. Pools are indeed a makeshift, but the disappearance of this modified and partial form of combination would most assuredly lead to a more complete and absolute form of combination. The logical outcome will be a concentration of the railways in the hands of an exceedingly small number of corporations, and the development may even be carried to a stage which the telegraph lines have already reached—a practical monopoly of one huge corporation.2 The federal law is thus unwittingly hastening the very result which it intended to frustrate. It defeats the very purpose which it was designed to accomplish. Our legislators imagined that they could prevent combination by prohibiting pooling; in reality they have destroyed that which still preserves partial competition and by prohibiting pools have made ultimate consolidation less remote. In their anxiety to prevent monopoly they have taken the surest step to create monopoly; in their ignorance of economic laws, while hoping to raise an impassable barrier to combination they have in reality levelled the course. The result will be the exact opposite of their anticipations.

The progress of this consolidation may indeed be arrested for a time. Railway wars cannot of course be the normal condition, and the short-haul clause of the law will have some slight effect in preventing the inordinately low war-rates to centres of

¹ Sec. 6 of act.

² [This process was in a fair way of accomplishment, under the remarkable leadership of Mr. Harriman, when it was effectually stopped by the interference of the government, and the application in 1904 of the Sherman Act through the Northern Securities decision. As to the later complete reversal of the government policy in the matter of competition and combination see *infra*, p. 261, note.]

competition. It is therefore possible, nay, almost certain, that the results of the pooling policy will be attained in another way -through the medium of "differentials." Rather than enter upon a war of rates, the stronger roads, which through their better facilities would tend to carry the larger portion of the traffic, will consent to give the weaker lines a "differential," i.e., allow them to charge so much less per ton, and to attract in consequence more business. The limit of the "differential" will depend naturally on the desire or ability of the weaker line to declare war rather than to accept less than the demanded differential. This system, however, is virtually, although not nominally, tantamount to pooling, in so far as it is a form of combination which still retains a certain amount of competition. But if successful, it is open to the same objections as pooling; while the absence of any vigourous executive authority to enforce the agreements will be felt still more strongly than has hitherto been the case in the traffic associations and pools. This policy of what we may call "differential pools" cannot possibly be stopped by any law.

The anti-pooling clause 2 of the federal law thus sins in a double manner. It weakens the government in its attempt to prevent discriminations, and it is destined to produce a state of affairs precisely the contrary of what was intended. The first three sections of the act, which define and forbid unjust discriminations,3 are in effect simply declarative of the common

¹This technical phrase is used in an entirely different manner from that described above, p. 192.

² Sec. 5: "That it shall be unlawful for any common carrier... to enter into any contract, agreement, or combination with any other common carrier or carriers, for the pooling of freights of different and competing railroads, or to divide between them the aggregate or net proceeds of the earnings of such railroads, or any portions thereof."

^a Sec. 1 declares that "all charges... shall be reasonable and just; and every unjust and unreasonable charge... is prohibited and declared to be unlawful." Sec. 2 defines an unjust discrimination as the charging any persons different amounts for a "like and contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions." Sec. 3 declares it unlawful "to make or give any undue or unreasonable preference or advantage to any particular person, company, firm, corporation, or locality, or any particular description of traffic, in any respect whatsoever, or to subject any particular person, company, firm, corporation, or locality, or any particular description of traffic to any undue or unreasonable prejudice or disadvantage in any respect whatsoever." These three clauses are virtual repetitions, and afford no basis for a definite decision.

law, although based almost literally on Cardwell's Traffic act of 1854. It may well be doubted whether this mere legislative enunciation and prohibition will suffice to abolish the evils complained of. The definition is so utterly vague as to be susceptible of varied interpretations; and whatever interpretation be adopted, it must, as we have already shown above, be so essentially elastic as to preclude any hard and fast application. Whether the prohibition of unjust discrimination will be anything more than the expression of a pious wish, depends largely on the commission; but the law imposes on the commission an unnecessarily severe burden, and by prohibiting pools removes what would have been a most serviceable crutch with which the better to support the burden. If self-help, or at least private cooperation, be a fundamental feature of the American polity, then this law violates the American idea, for it voluntarily resigns the advantages that would accrue from the self-help of the railways. We do not object to state interference, but we do object to the hasty abandonment of an institution which tends to decrease the necessity of state interference. And when the abolition of the institution results, as is assuredly the case with pools, in hastening the advent of the very monopoly which it was designed to avoid, then the prohibition becomes not only unwise but absolutely absurd. The anti-pooling clause is a sad evidence of the results of demagogic ignorance in producing hasty and ill-advised legislation. The Philistines of the daily press exaggerate the dangers of the short-haul section, because these lie on the surface; but for the far more important fifth section of the federal law they have neither eye nor ear. Fortunately, pooling will practically continue in another form which Congress will be powerless to prevent.

The Senate select committee of 1886 has at least this claim to respectful attention, that it opposed the prohibition of pools. The abandonment of its position was an inexcusable concession to popular clamor. A careful analysis of the testimony discloses the fact that not only all the railway officials, but also a large majority of the intelligent shippers, had become convinced of the breakdown of competition and the necessity of pooling. The railway men opposed unrestricted competition because it curtailed profits; the intelligent shippers opposed competition be-

cause it produced discrimination.¹ Both were correct. The Senate committee, therefore, swayed by the unanimous opinion of the railway men and the preponderant weight of testimony on the part of the public, decided that "the evils to be attributed to pooling are not those which most need correction," and that "it would seem wiser to permit such agreements rather than by prohibiting them . . . to endanger the success of the methods of regulation proposed for the prevention of unjust discrimination."² That the members of the committee, with a few honourable exceptions, should later have seen fit to abdicate their strong position is to be regretted. The clause as it stands is in defiance of the teachings of experience and the laws of political economy.³

6. Other Forms of Competition.

Free competition between railways, as a regulator of transportation charges, is thus a mere chimera. But "competition" has become such a shibboleth with a certain class of reformers that it may be well to devote a few words to other forms which are advocated as panaceas for existing abuses.

Perhaps the most common recommendation is that of competition of carriers on the line. Divorce entirely the business of the common carrier from that of the highway; let the corporation indeed own the railway, but let every one have the right to run his own trains and use his own locomotives on this railway. This indeed would be perfect competition, but of a very different kind from the competition between the railways that we have been considering. Alluring as is this plan at first blush, it is open to three vital objections. 1. It is impracticable, or, if practicable, would be far more costly. 2. It would not cure

Among the shippers who uphold pooling may be mentioned (vid. Report, Testimony), Bacon (707), Burrows (1170), Chapin (684), Dunnell (1330), Elliott (695), Field (655), Francis (919), Goodman (1104), Gue (1070), Herrick (217), Joseph (1030), Lowry (721), Meek (1012), Miller (269), Murch (941), Noble (988), Phelps (1410), Reynolds (1185), Root (1198), Speare (347), Tredway (841), Welch (1445), Wicke (766), and Williams (1059). The number of shippers who oppose pools is far smaller, and of these the great majority base their opposition on their belief in "free, open competition in railways, as in other things"!

^{*}Report, p. 201.
*Even European experts who are by no means admirers of the American railway system concur in this opinion. See Archiv für Eisenbahnwesen, 1887, p. 333. Cf. also Jeans, Railway Problems, 1887, p. 518.

4 Cf. Bontoux. Die Concurrenz im Eisenbahnwesen, 1873.

the great evils of the present system. 3. It would produce abuses far worse than any which now exist.

First, the plan is impracticable, or, if practicable, would be far more costly. The project is not new. Competition between carriers was the original theory. The early railway acts were based on the canal and turnpike acts. When the system of turnpike trusts was inaugurated in England in 1706,1 the original public character of the king's highway disappeared, and the control fell into semi-private hands. But the highway of course remained free to all on payment of the tolls. With the advent of canals the private speculative element was introduced into transportation; for although a very few of the canals were put into the hands of canal trusts, the first canal 2 and most of the others were built by private individuals and corporations. The early canal acts, however, invariably contained the clause that all persons without distinction should have free liberty to use the canal on payment of tolls. When the first tramway bill was enacted in 1801,3 it adopted this idea, and provided, among other sections borrowed verbatim from the canal acts, that all persons should have the right to use the tramway with their own horses and wagons. In the charter of the first railway built with the avowed purpose of using steam locomotives a similar clause was introduced, modified so as to meet the exigencies of the new methods of transportation.4 For many years the identical provision is found in all the railway acts.

In the United States analogous provisions were inserted in the early charters. So, e.g., in the charter of the Ithaca and Oswego railroad.⁵ In the general railroad law of Prussia com-

¹The old Watling road. The first turnpike act empowering the raising of tolls was passed 1663, but the power was given to overseers, not trusts. It is only in the last few decades that the turnpike trusts are giving way to the highway boards and that the public character is being restored.

the highway boards and that the public character is being restored.

² Duke of Bridgewater's canal from Liverpool to Manchester. Acts of 1758, 1759, and 1762.

^{*}The Surrey railway from Wordsworth to Croydon. Cf. Francis, History

of the English Railway, 1851, vol. i.

*Liverpool and Manchester Railway Act. 7 Geo. IV, cap. 49, cl. 165:

"All persons shall have free liberty to use with carriages all roads, ways, and passages for the purpose of conveying goods or passengers or cattle."

^{*}Sec. 12: "All persons paying the toll aforesaid may, with suitable and proper carriages, use and travel upon the said railroad, subject to such rules and regulations as the said corporators are authorized to make by the ninth section of this act. Laws of New York, 1828, p. 17. The "proper carriages" of course included the steam-carriages.

petition between the carriers is likewise legalized, after the expiration of three years from the opening of the railway.¹ In France the principle was carried so far as actually to distinguish between the charge for the use of the track, or the toll (droit de péage), and the charge for the transportation itself (prix de transport). To this day even, the concessions of the railways contain the legal distinction.² Everywhere, in fact, a sharp line was drawn between the two functions of the railway company—that of providing the public highway free to all and that of furnishing the means of transportation on the highway. The railway company was not excluded from the latter function, but it was thought that its activity in this direction would be very slight.

The experience of a very few years totally destroyed all these anticipations. As a matter of fact the transportation was conducted solely by the railway company. Even in those countries which earnestly endeavored to enforce the provisions, legislation was impotent to check the natural tendency. There were weighty reasons which did, and always must, militate against the success of any such scheme.

The most obvious objection, of course, is the technical one. The technical character of the railway undertaking renders it imperative to have unity of administration. If every shipper could run his own trains, it would be almost impossible to preserve order or avoid serious accidents. The private trains would have no means of enjoying terminal or other conveniences, and if the railway company were compelled to afford these conveniences, it would soon display such power of annoying the private shippers as to render the plan nugatory. At a time when the engineers were grappling with the problem and devising schemes for allowing two trains to pass each other on a single track, the project of competition between private locomotives might be plausible; to-day it is unintelligible and absurd. Entirely apart. moreover, from the objection of technical impracticability, is the vital difficulty of increased expense. The cost of service would be so enormously increased as to result in higher, not in lower,

¹ Eisenbahngesetz, 1838, § 27.

³ Picard, Chemins de fer français, v. p. 184; Jacqmin, De l'exploitation des chemins de fer, i, p. 20.

charges. All shippers would not be large shippers. The number of those who could despatch a train with forty cars would be exceedingly limited. The result would be the necessity of ten engines for small trains where one now suffices, as well as a vast increase in the extent and facilities of the terminals and a proportionate increase in operating expenses. The control of transportation is indissolubly bound up with the control of the roadbed.

But secondly, the scheme would not cure the great evils of the present system. What is sought is the abolition of unjust discrimination. It is difficult to see how free competition of the carriers would effect this. The railway would still be empowered to charge tolls; but it is impossible, as has been shown in the preceding essay, that these tolls should be alike for all classes or distances. The expenses of the private trains would of course be proportional to cost of service; the cheap goods would be more expensive to transport than the dear goods. In order, therefore, to render the transportation of cheap or distant articles at all possible, the tolls would have to vary in a large degree in their favour.1 According to the principle of value of service it would be requisite to have classification and local discrimination in tolls, as in the turnpike and canal tolls, but in a necessarily increased proportion. The private shippers of coal, e.g., would have to defray not only the operating expenses proper but also the fixed charges representing the capital invested in the rolling stock; the railway company, on the other hand, could afford to transport this coal at lower rates, because it could compensate by charging higher rates on other traffic which is better able to pay. Under a régime of competition of carriers, therefore, it will be necessary to differentiate the tolls correspondingly unless the present traffic in cheap or distant goods is to be entirely stopped. The discriminations represented by the tolls would be analogous to the present discriminations in the total rates. To fix the tolls by law would not mend matters, for if the law can successfully fix tolls, it can equally well fix the total charges as imposed at present. The principle involved is the same. But

¹Mr. Hudson proposes equal mileage tolls (Railways and the Republio, p. 397). But the impracticability and inadvisability of this have already been shown.

if the extent of tolls is left to the discretion of the railway companies, the condition of affairs is not improved a whit. The difficulties of regulation according to a well-digested system would not be diminished.

But thirdly, it is very probable that abuses would be engendered far worse than any which exist. There would be such an evident gain in the larger shippers combining to lessen running expenses that before long competition would again forcedly result in combination. This would practically intensify personal discriminations. The large shippers might through combination reduce the charges to a minimum and, not being common carriers, would refuse to take the goods of the smaller shippers. The latter would thus be put at a decided disadvantage, while now they have at least an equal right to insist on transportation. If it be objected that the small shippers might also combine, the answer is that the practical difficulties in the way would be well-nigh insuperable; and that even if they were overcome we should no longer have the condition of free competition between The very basis of the argument would fall the carriers. awav.

The legitimacy of such a conclusion is emphasized by the history of the English railways. For there, as in other countries, we find vestiges of an arrangement which is only a slight variation of the scheme proposed. That is, although we do not find cases of competition between carriers who own their locomotives, there have been instances of competition between shippers who own their own cars. This is technically known as the principle of separation of traction and carrier.1 The most striking example of the inadequacy of the remedy suggested is seen in the case of the coal companies. Each of these as a rule owned its own cars. Yet the result of the competition has been the building up of a few gigantic monopolies to the exclusion of the smaller shippers. The agglomerated companies always succeeded in procuring better facilities in the way of storage of coal, etc., in the depots than the isolated small shippers, and the inevitable tendency has reasserted itself. So far has this process been carried as to practically preclude small shippers from sending coal without the

¹ Or of "motor" and carrier.

consent of the larger companies.1 Separation between motor and carrier would aggravate, not diminish, the abuses.

So incisive are the arguments against free competition of carriers that every careful scientific investigation of the question has abundantly proved the fruitlessness of the scheme. Already in 1839 an English committee reported, after an extensive review of the facts, that such a plan was no less undesirable than impracticable.2 In 1844 Gladstone's committee repeated the elaborate refutation.3 But the attempt to enforce this competition was nevertheless found in the charters. Cardwell's committee of 1853 still discussed the project.4 But from that time the clauses in the charter were regarded as mere archaic curiosities. The Duke of Devonshire's commission abandoned the fiction once and for all.5 In Chichester Fortescue's committee the efforts of the early legislation are reviewed with a grim sarcasm; 6 and, finally, in Mr. Ashley's recent committee the whole matter is not even deemed worthy of separate mention.7

But although England had been radically cured of her early misconceptions, ignorance of English experience led to a revamping of the old doctrines on the continent. The matter was taken up at the close of the sixties in Germany, and for several years would-be reformers and even economic congresses sounded the praises of the new panacea.8 It became, as has been wittily remarked, the enfant terrible of the railway question in Germany and Austria. Thrown out of one window, it came bobbing in at the next.9 Book after book was written to explain the advantages of the system, but science and common sense again

¹ Cf. Royal Commission (1866), Evid. qu. 12,502-12,519; ibid. (1865), qu. 9772 et seq., 9853 et seq. Already in 1853 we find the same tendency. Cf. Joint Select Committee, 1853, Fifth Report, pp. 201-206.

² Select Committee on Railways, 1839, Second Report.

Select Committee, 1844, Appendix to Evidence, p. 19.
4 Joint Select Committee, 1853, Fifth Report, p. 8: "In theory the railway is like a common highway; in practice, no one can carry upon a railway but the owners of the line."

Royal Commission, 1867, Report, § 7. "Committees and commissioners, carefully chosen, have for the last thirty years clung to one form of competition after another," etc. Select Committee, 1873, Report, p. xviii.

^{*} Select Committee on Railways (Rates and Fares), 1882.

* Technically known as "Die Freiheit der Schiene."

Sax, Die Verkehrsmittel, ii. p. 112.

triumphed,¹ and to-day the project is considered as definitely laid to rest. Yet scarcely has the matter been finally decided on the continent when we are called upon to go over the same tedious ground in the United States. Here, too, the plan is elaborately set forth² with a naïve confidence in its novelty and efficacy—a confidence that can be excused only on the assumption of woeful ignorance of the literature or absolute incapacity to learn from experience. But it plainly cannot be the duty of a scientist to refute in detail what has been disproved time and time again. The practical character of the American public, moreover, is so well assured as to render the necessity of any such refutation extremely improbable.

Another variation of this form of competition deserves a passing notice, viz., the demand for the enforcement of running nowers. This theory is supposed to uphold competition by allowing the trains of any one railway to pass over the tracks of the other. The English Parliament, after having abandoned all the other theories of competition, still clung to this; and one of the main features of Cardwell's act of 1854 was an attempt to realize this idea. In the United States also it is advanced as a panacea. But Robert Stephenson already in 1853 emphatically condemned such running powers as incompatible with safety and practical administration.3 The committee of 1872 finally forsook the old position and came to the conclusion that in all cases where running powers existed they were the result of voluntary agreements.4 It is practically impossible to compel the railways to grant such powers against their will, and if it were possible it would not be wise.5 It would be far more expensive and dangerous, and it

¹Cf. the discussions in Reitzenstein, Die Gütertarife der Eisenbahnen, 1854, p. 4259; Perrot, Die Eisenbahnreform, 1871, pp. 34-37; G. Cohn, Streitfragen der Eisenbahnpolitik, 1874, pp. 17-32; Bilinski, Die Eisenbahntarife, 1875, pp. 14 et seq.

² Hudson, The Railways and the Republic, 1886, ch. x, esp. p. 400. Mr. Hudson is just about twenty years behind the times. His arguments are almost word for word those of Dorn, Aufgaben der Eisenbahnpolitik, 1874.

³ Select Committee on Railway and Canal Bills, 1853, Evid., pp. 115, 116. ⁴ Select Committee on Railway Cos. Amalgamation, 1872, Rep., pp. xlv, xlvi.

⁸ Hudson, Railways and the Republic, 382, gives a few familiar examples of one track being used jointly by two railways. But that is quite another thing from allowing one track to be used by all the other lines, especially if the first one does not consent. Voluntary arrangements are not enforceable running powers.

would put a check to all railway building by powerful capitalists, for it would render the quantity of traffic carried by any one line uncertain and subject to the discretion of the government. In France, likewise, there have been repeated attempts to enforce these running powers, but the only case in which they have not ignominiously failed has been that of branch, not competing, lines.¹

But the most amusing error remains to be noticed. Running powers or "working arrangements," when voluntary, are just the opposite of what they are supposed to be. In lieu of being a form of competition, they are a form of combination—the forerunner of pools and frequently their concomitant. The railways agree to forward traffic over each other's lines, or to divide the traffic in cases where they use the same line, not in order to maintain competition but in order to avoid competition. And if enforceable running powers were universal, they would simply result again in private agreements. It would not be an advance of competition, but a check to competition. Even if it were practicable, it would simply accelerate the process which it was designed to arrest. Compulsory competition is an absurdity. Fortunately, the Interstate Commerce law expressly disclaims all intention of enforcing such working arrangements,2 although it may well be doubted whether the legislators were actuated by the reasons just recounted. The prohibition of pools militates against the acceptance of any such flattering imputation.

There remains finally the subject of water competition. In so far as we have to deal with artificial waterways the same unmistakable tendency to combination is apparent. The competition of canals is virtually of no importance as the regulator of railway charges. In the first quarter of this century the charges on the English canals were so extortionate and the abuses so extravagant that great hopes were staked on the competition of the railways. The railways indeed did compete with the canals, but so effectually as to silence all competition. They bought up

¹Thus in the revision of the cahiers de charge imposed on all the "great companies" in 1857-59 these running powers were reserved to all branch lines and prologations on payment of a fixed droit de péage. Cf. the documents themselves, titre vi. art. 61, in Picard, Chemins de fer français, vol. iv, p. 71. As to the difficulties to which even this has given rise, see Aucoc, Droit administratif, vol. iii, pp. 779, et seq.

³ Cf. sec. 3.

the canals or amalgamated with them, and before long the condition of affairs was reversed. New canals were now built to compete with the railways in place of new railways being built to compete with the canals. The conditions had shifted. But all was in vain. Already at an early period the rivalry of the canals had been overcome; by 1872 the influence of the canals as competing factors was infinitesimal. The railways were the victors; competition had again failed.

On the continent the condition is the same. Everywhere the canals have been losing their traffic. Even when owned by the state, their efficacy is a thing of the past, although in such cases there can naturally be no consolidation with the private railways. Isolated efforts are yet made to further the construction of new canals, but the better opinion now recognizes the ultimate uselessness of such attempts.

Although the movement has not progressed quite so far in the United States, the tendency is the same. From 1830 to 1850 the canals were formidable competitors of the railways, but from that time on the private canals were gradually bought up, while the state canals were either abandoned, sold, or reduced to a state of utter decrepitude. The efforts of the Clinton league in New York were unable to arrest the movement. In 1886 an expert witness stated to the Senate committee: "I do not think that there is a canal in the United States, except the Erie, that is not more or less controlled by the railroads." The competition of artificial waterways can no longer be relied on.

In respect to natural waterways the matter is slightly different. The sea and navigable rivers cannot be subjected to a

¹ In 1865, of the four thousand miles of water and river communication in England and Scotland, about one-third had been amalgamated with the railways. Royal Commission, 1867, Rep. App. qu. 9899 et seq.

railways. Royal Commission, 1867, Rep. App. qu. 9899 et seq.

*Select Committee, 1872, Rep., p. xxix. Also pp. xx-xxiv, with full references to the evidence. Cf. in general the admirable work of Freiher von Weber, Die Wasserstrassen Nord-Europas, 1881, pp. 92-111. Also de Franqueville, Du régime des travaux publics en Angleterre, 2^{mo} éd., 1875, ii, pp. 274-306.

³ Cf. Nördling, Die Wasserstrassenfrage in Frankreich, Preussen und Oesterreich, 1885, esp. pp. 28, 128, 158, 171-176. A French translation of this work has just been published.

^{*}Cullom Committee Report, Test. (Wistar) 507. For a careful investigation of the whole question, cf. Mosler, Die Wasserstrassen in den Vereinigten Staaten, 1877. Much valuable material may be found in Kupka, Die Verkehrsmittel in den Vereinigten Staaten, 1883, pp. 41-126.

monopoly.¹ In such cases the competition is real and active, although only spasmodic in the case of internal navigation. The importance of the Erie canal, and the extent to which it really regulates the charges by rail, is due solely to the fact that it is a link in the chain of natural waterways. But the influence of internal navigation, at all events for the next generation or two, is apt to be seriously exaggerated, and the exuberantly enthusiastic expressions of the Cullom report savour, it must be confessed, slightly of rhodomontade.²

Finally, it must not be overlooked that water competition, in so far as it is an important factor in internal transportation, is precisely the chief cause of local discriminations. Differential rates are due in great part, as we have seen, to the existence of competing centres. As long as the competition exists the discriminations must continue. Hence, those who clamour for the construction of new waterways or the improvement of the old may indeed succeed in effecting a reduction of charges, but forget that they are only strengthening the causes of whose results they complain. To maintain competition and to avoid discrimination is impossible.

7. The Interstate Commerce Commission.

The chief provisions of the federal law have now been discussed. There remains to be considered only the machinery to enforce the law, i.e., the Interstate Commerce Commission.

The commission idea is essentially a product of the Anglo-Saxon mind. On the continent of Europe direct administrative control has always been comparatively stringent, and the extent

¹Yet in England there are instances even of this. Cf. Select Committee, 1872, Rep., pp. xix, xx. Select Committee, 1881, Evid. qu. 8133.

The manifest destiny of our country points unerringly to this emancipation of the waters as its next great work, a fitting sequel to the emancipation of the slave, a destiny not of war, but of beneficence and peace, to which the heart of the nation turns as spontaneously and resistlessly as the waters of its great river flow to the Gulf." Report, p. 175. Cf. with this "manifest destiny" the figures as to the decadence of the Erie canal in Statistics regarding the Movement of Eastbound and Westbound Traffic over the Trunk Lines, etc., 1885, pp. 16, 17; also Report on the Internal Commerce of the United States, 1885, pp. 408-414. The Windom Committee likewise favored government canals. But the value of their suggestions may be inferred from the fact that they also recommended one or two government railways to regulate the private lines. Senate Select Committee on Transportation Routes to the Seaboard, Report, 1874, pp. 187-242.

of state interference has been conditioned only by considerations of a political nature.¹ Almost every possible system has been tried; and if entire immunity from abuses has not been attained, it is not for lack of serious endeavours on the part of the governments. In no country was the public nature of the railway business lost sight of. Even where financial reasons led to the construction of railroads by private companies, the fostering and restraining action of the public authorities was never absent. The corporations were not able to dictate terms to the state.

In England the history was quite different. The railways, indeed, started out as humble suppliants for favors, but governmental action confined itself to seemingly guarded restrictions in the charters, such as maximum clauses and limitations of dividends, all of which were soon shown to be utterly powerless to prevent abuses. The railways increased so rapidly that their position soon became that of dictators, in place of suppliants. Warnings of able men like Morrison went unheeded.2 Praiseworthy attempts were still made by far-sighted statesmen, but the railway opposition was sufficiently powerful to crush all interference. Lord Seymour's bill of 1840 provided for the appointment, by the Board of Trade, of railway inspectors, who should have the right to "remonstrate" with the companies.3 But the law remained a dead letter, and in 1842 Gladstone brought in another bill giving the Board of Trade inspectors certain compulsory powers.4 This law was not more successful than its predecessor, and finally, as the outcome of the great investigation of 1844, a commission was appointed within the Board of Trade and put in activity in 1845. It was known as Lord Dalhousie's Railway board, and was invested with extensive duties of examining all new projects. But although it worked hard, it discountenanced parallel roads and thus incurred the hostility of the railways and ultimately the jealousy of Parliament itself.5 As a facetious member said, it attempted to do what five angels

¹ Weber, Nationalität und Eisenbahnpolitik, 1876. Audiganne, Les Chemins de fer d'aujourd'hui et dans cent ans, 1858-1862.

² Cf. James Morrison, Speech in House of Commons, May 17, 1836; id., The Influence of English Railway Legislation on Trade and Industry, 1848, p. 86, and App., pp. 107, 158.

³ and 4 Vict. c. 97, An act for regulating railways.

⁴5 and 6 Vict. c. 55, An act for the better regulation of railways, etc. ⁶Cf. Report on Railway Companies' Amalgamation, 1872, p. vii.

could not accomplish; and public opinion not coming to its rescue, it was abolished ingloriously the same year. Nothing daunted, however, the government brought in a new bill constituting the Board of Railway Commissioners, in 1846, with moderately extensive powers.¹ But the railway interest again succeeded in robbing the bill of all its vitality, so that the only function left to the new commission was "inquiry and publicity." It vegetated for five years, accomplishing practically nothing, and was quietly abolished in 1851, while all its "extensive powers" were re-transferred to the Board of Trade.

For over twenty years the commission idea slumbered. Cardwell's act of 1854, the only serious attempt at governmental regulation during the interim, left the enforcement of its provisions to the common courts, and with the customary results. It was not until 1873 that the present railway commission was finally constituted. But although its activity has been incessant and the number of cases disposed of far greater than those previously adjudged by the purely legal tribunals, it has by no means achieved an unqualified success. The manifold complaints in the late investigation of 1881-82 and the proposals now pending to reconstitute and strengthen the commission bear ample testimony to this fact. The commission is practically a court for railway cases,2 but its efficiency has been checked in three ways. Its jurisdiction is limited, its procedure is cumbrous and expensive, and its powers of enforcing judgment are restricted. Its jurisdiction is limited, with a few unimportant exceptions,3 to cases arising under Cardwell's act of 1854, which forbids undue preferences and requires proper facilities. The commission has endeavored to widen its powers by interpretation, as, e.g., in

¹ Accounts and Papers, 1846, vol. iii. p. 277; and the bill as passed May 21, in Accounts and Papers, 1847, vol. iii.

²Of the three members and two assistants, one must be a jurist. In questions of fact their decision is nominally final; if they think it a question of law, then they are to "state a case" in writing, and the matter goes up to the higher court, who are either to decide it, or to give their opinion as to the law and send the case back to the commission. But as the appellate court can issue a writ of mandamus compelling the commission to "state a case," the decisive power does not rest with the commissioners. Uf. Seventh Report Railway Commission, p. 3.

³ Such as reasonableness of terminals, enforcement of through rates, agreements with canals, etc. 36 and 37 Vict. c. 48, §§ 8-11, 14-17. For list of cases decided up to 1882, of. Select Committee, 1881, Rep., App. no. 17, pp. 68-79.

the case of transgression of the charter maxima, but in this it has ignominiously failed.1 Hence it cannot dispose of all complaints. Secondly, the procedure is unsatisfactory. The power of the railways is so great that the private shippers refrain from complaints for fear of reprisals. The weapons of retaliation in the hands of the companies have been ruthlessly employed.2 But even if the shipper determines to brave the opposition of the railway, the expense is so enormous as to induce him in many cases to let the litigation drop.3 The usefulness of the commission is thus greatly impaired. Finally, the means of enforcing judgment are sadly insufficient. The decisions of the commission refer only to the future, not to the past. Its "injunction" does not enable the complainant to recover damages. Furthermore, the companies sometimes flatly refuse to obey the decisions until finally ratified by the appellate courts, and even then they frequently contrive to evade the judgment.4 The English corporations are far less amenable to the force of public opinion than the American. In short, although arbitrary personal discriminations are comparatively rare 5 owing to the greater development

¹ Brown vs. Great Western, Eighth Report Railway Commission, p. 4; App., 74-77. The high court of judicature issued a writ of prohibition against the commission. Sclect Committee on Railways, 1882, p. 201. In Scotland it was different. Fifth Report, p. 8.

² "A man must be very chary in bringing an action against a railway company." Select Committee, 1881, Evid, qu. 3745. A colliery company complained of overcharges, and the railway refused to transport the coal at all. Evid., 1881, pp. 138-142. A similar case arose with an iron company, and when the railway was compelled to take the goods, it sent them at such inconvenient times and added so many other vexations that the iron company was compelled to compromise. Ibid., pp. 200, 237, 238. A firm in Bedford complained of exorbitant terminals, and the railway retaliated by raising the rates to Bedford more than one hundred per cent, and not to other parts of the line. Ibid., p. 26. A brick and tile manufacturer complained of the rates, and the railway compelled him to prepay the charges, which were immediately raised fifty per cent. Evid., 1882, p. 220.

A local board spent in one case £2500, and then abandoned the contest

for lack of funds. Evid., 1881, p. 447.

In a case against the Great Northern of Scotland the railway company was defeated after a stubborn fight, but reduced its rates only to the particular station in question and continued to make illegal charges to all the other stations. A separate suit would have been necessary in each case. Evid., 1881, p. 207. In the Neston case the overcharges were continued notwithstanding a decision by the appellate court. "There is no power to enforce obedience to the law." Evid., 1881, qu. 3094, and pp. 140 et seq. But they still occur. Of. Evidence, 1881, qu. 1730-1737, where one shipper was compelled to abandon business. As to allowance for quantity,

see qu. 11,804 et seq.

of combination, it may well be doubted whether the railway commission has produced a state of affairs much, if at all, better than that which existed prior to its inception. The new bill of 1887 emphasizes the feeling of necessity for a much more thoroughgoing reform.

In the United States the commission idea has two independent sources-the Granger movement and the public sentiment of Massachusetts. The policy of the American commonwealths has gone through three phases: the period of state aid and partial regulation, to 1845 or 1850; the period of laissez faire, to 1870: the period of active governmental interference, to the present. The moderate state regulation of the first period was due to the supposed analogy between railways and canals or highways. This varied naturally with the different sections of the country-from the railways owned and managed by the state, as in South Carolina and Pennsylvania, to the charter regulations in New York, and the limitations of dividends in New England. When the rates were fixed, they were based on the canal and turnpike tolls. The immoderate state aid to railways, again, was due to the mania for internal improvements during the thirties and forties. The scanty legislation of this period remained in great part unenforced because of the desire and necessity of more extended means of communication, and thus the commonwealth gradually ushered in the second phase of the development, that of laissez faire and unlimited competition. The system of special charters was succeeded by that of general railroad laws which exacted only a few formalities.1 Not only were the railways left to themselves, but the belief in the absolute efficacy of unalloyed competition was so strong as to lead to a logical carrying out of the theory. Parallel or competing companies were prohibited to consolidate.2 The more lines, the more competition; the more competition, the more benefits to the public—that was the theory.

The results of this policy soon became apparent. The crisis

¹So in New York the law of 1848, and finally that of 1850, which permits any twenty-five persons to form a company and file its articles when \$1000 per mile is subscribed and \$100 actually paid in. So in Illinois in 1849, and in the other states in the following decade.

The railways of course avoided these provisions through the instrumentality of leases for long periods.

of 1857 brought disaster on the country; but other causes, like the wildcat banks, were at work, besides the railways. Then came the war, which silenced all discussion for a time. But with the close of the war and the advent of wild railway construction in 1867, coupled with the prodigious development of the agricultural interests, the fruits of this unlimited freedom were seen. A system of the most reckless swindling and the most outrageous discriminations arose, such as has never existed before or since in any civilized society. The corporations regarded themselves as purely private money-making enterprises, and seemed not to have the faintest conception of any duties to the public. In the West the abuses were further intensified by the fact of absentee ownership. so that the situation became intolerable. In response to repeated demands for redress, the railways flatly denied the right of the state to interfere with them at all. Things went from bad to worse.

It was as a protest against this attitude that the Granger movement arose. The National Grange, established in 1867 purely as a means of mutual improvement and protection for the farmers.2 was soon drawn into the political warfare against the railroads. At first moderate in their demands, it now became extravagantly violent in word and action.3 But while the Grangers demanded strict regulation, they still believed in the saving force of competition. Failing to see that the bad results of which they complained were due to prohibition of combination, they made the prohibition still stronger. They allowed free competition between the roads, and then hoped to legislate away the results of free competition. Competition was still the panacea. That the railroads did not act justly was their fault; ergo, said the Grangers, enforce free competition and prevent by legislation the perversion of the principle. That is, they attacked the problem in just the wrong way; they per-

^{1&}quot;The whole story is told in these two words—absentee ownership. While the Western patron was plundered, the Eastern proprietor was robbed." Report of Illinois Railroad Commission, 1874, p. 17.

^a Cf. Report of New Jersey Bureau of Statistics of Labor, 1886, part vi; and Cloud, Monopolies and the People, 1873.

At the general convention at Springfield, 1873, it was resolved that the railways "have proved themselves of as arbitrary extortion and opposed to free institutions as the feudal barons of the Middle Ages." Other favorite phrases were "money-sharks" and "bloated bondholders."

mitted the cause to remain, and hoped to remove the results; and in this they necessarily failed.

The hot-bed of the movement was in Illinois, where the constitution of 1870 adopted provisions of a stringent nature. The law of 1871 forbade any discriminations at all, and after its unconstitutionality had been proved, was followed by the law of 1873 which gave the commissioners power to fix rates. Iowa. Minnesota, Michigan, Ohio, Wisconsin, followed with maximum, pro rata, and short-haul laws, often fixing the rates or giving the commissions absolute and mandatory powers.1 But the crudity of the laws was shown by the haste with which they were repealed.2 The political results of the Granger movement indeed were of inestimable importance in putting an end to the arrogant pretensions of the corporations and in producing the sweeping decisions which finally settled the power of the state to regulate its creatures.3 But the legal question was one thing: the economic question was another. The Granger movement was economically as unwise as it was politically important and successful. The compulsory commissions were an avowed failure.

Far better results were achieved by the advisory or supervisory commissions, of which Massachusetts afforded the first and most successful example. As Charles Francis Adams himself declares, it hit upon the correct method of legislative control by what was at the time nothing but a "happy guess." 4 Instituted in 1869 without extensive powers, it gradually concentrated the force of public opinion upon each particular abuse, and by its admirable reports, lucid explanations, and impartial decisions succeeded in producing a hitherto unheard-of harmony between the railways and the public. Massachusetts still remains the chief type of advisory commissions. Many other states, and notably New York and Iowa, possess commissions

¹ For these various laws (Iowa 1874, Minn. 1871, Mich. 1871, Ohio 1873, Wis. 1874), see *Cullom Rep.*, pp. 71-74, 98-102, 109-111, 119, 135-137.
² Minn. 1875, Wis. 1876, Iowa 1878. In Michigan and Ohio the laws were

not enforced. In Illinois the powers of the commission were not used after the decision of the Granger cases. Cf. supra.

Mun vs. Illinois, 4 Otto, 113-187. Decided in 1876.

*Cullom Committee Rep., Test. p. 1202. Cf. State Railroad Commissions, published by The Railroad Gazette, 1883.

⁵ By ch. 338 of laws of 1885, the board was given powers to fix rates in a particular case; but it was a case of interstate commerce, and thus beyond their purview.

of this nature, and the commissioners themselves object to any undue extension of their powers.1 Their lack of authority and the support of a vigorous public sentiment have been the secret of their success. Even the Illinois commission, which possesses the authority to fix rates, has voluntarily adopted the Massachusetts principle of arbitration as more efficacious.2 and the Kansas commission has made use of its discretionary power to place a very liberal interpretation on some rather stringent laws.3 The chief instances of compulsory commissions to-day are to be found in the South. The Georgia commission promulgates from time to time a standard tariff, but it uses the authority with such wise discretion as to preserve the interests of the railways.4 The Alabama commission possesses what is virtually the French power of homologation. New Hampshire is the only northern state with a compulsory commission; but the complaints were so few that the rates actually in force were accepted as the standard rates.5

The Interstate Commerce Commission is also invested with only moderate powers. It may investigate any matter falling within the purview of the act, whether the complaint be made by private individual, railway, or state commission, or it may institute inquiries on its own motion without any complaint whatever. If its recommendations are not accepted by the common carrier, the circuit court, and ultimately the supreme court, is to give the final decision, the report of the commission being prima facie evidence of the facts. The commission thus has only discretionary powers; and its success will depend largely upon the character of its decisions and the possibility of concentrating public sentiment on the question at issue. Whether it will attempt, like the English commission of 1845, to do "what five

As to New York, cf. Report of Railroad Com., 1884, p. 65; 1885, p. xxxiv et seq. As to Iowa, see Report Com., 1884, p. 43; 1885, p. 56. As to Illinois, see Report Com., 1884, Moore vs. III. Central.

² Cf. Report of its chief commissioner in Cullom Test., 734.

Report Kansas Com., 1883, p. 28.

^{*}Eleventh Rep. Ga Com., 1885, p. 12; Twelfth, Thirteenth, and Four-teenth Reports, 1886, p. 5.

^{*}The compulsory commissions to-day (1887) are: Ga., S. C., Ala., Tenn., Miss., Cal., N.H. The advisory commissions are: Mass., N.Y., Ia., Wis., Minn., Mich., Col., Dak., Neb., Va. In Kan., Ill., Mo., and Ky., the powers are somewhat broader, but not rigidly exercised. In Conn., Me., Vt., R.I., O., the duties are mainly those of inspection.

angels could not accomplish," must be left to the future to decide.

Our conclusions may now be summarized. The federal law contains provisions of undoubted value. Among these the enforced publicity of tariffs and projected uniformity of accounts deserve the heartiest commendation. Nothing is more conducive to strict impartiality toward the shippers and to perfect integrity toward the owners than the consciousness of public accountability. Secrecy has ever been the father of duplicity and favoritism. No one indeed can be legislated into righteousness, but the noonday glare of open responsibility is the strongest possible preventive of gross injustice. All those sections, therefore, which demand publication of the tariffs, submission of agreements, and eventual uniformity of accounts, must be acknowledged eminently wise provisions. In like manner the institution of a commission with powers to serve as a medium of this responsibility and as an interpreter of the public demands must be unqualifiedly com-Mere legislation is impotent without proper machinery to enforce the decrees, and reliance on the judicial branch of the government has always been found inadequate.

Of more doubtful value, however, are the clauses which attempt to ensure equitable charges. The definition of unjust discrimination is necessarily so vague as to be susceptible of varied interpretations. In itself it settles nothing. In so far as preferential rates are concerned, the law is guilty of a grave mistake in prohibiting pools. The crying evil of railway management to-day is personal discrimination. No mere legislative penalties will successfully abolish this. Pools are perhaps not a completely satisfactory solution of the problem; although as adjuncts to our traffic associations, they have accomplished incalculable good. They must rather be regarded as a temporary palliative, as a step in the onward march to final consolidation. But their prohibition at the present time is premature and unwise, and unnecessarily jeopardizes the success of the law. The underlying principle of pools-that of checking undue competition and ensuring uniformity of rates—will undoubtedly reappear in another form, most probably in agreements to give adequate "differentials." But these new agreements will be still more deficient in stability and coercive power than were the pools, and the ultimate outcome promises to be a more complete combination, a more thoroughgoing frustration of the competition which the law seeks to establish. Competition is the handmaid of personal discrimination.

Finally, the curtailment of local discriminations through the short-haul clause is a double-edged sword. It is intended to benefit the public, but if strictly enforced it might in many cases injure the public. As a check to arbitrary management and to the systematic disregard of less favoured localities, it is indeed defensible. But the important factors of water and foreign competition as well as of long-distance traffic must not be overlooked. As long as these exist, local discriminations will continue to be necessary in some form or other. The mere claim. indeed, that existing business relations have been built up through the medium of differential rates and that their abolition would throw all trade into confusion, is not a sufficiently valid reason to criticize the law. For if these differential rates are unjust, even temporary distress cannot be pleaded as an excuse for continued injustice. But it has been shown above that certain local discriminations are not unjust. Value of service as a subordinate principle justifies carefully guarded infractions of the short-haul clause. Without these infractions we should soon attain the double result of ruining the railways in favor of their water competitors and of voluntarily abdicating the advanced position which improved means of transportation have given us. Each section of the country would be separated from the rest by the strongest of mutually protective tariffs. Either the commission must frequently relax the rule, or it must so liberally construe the clause as to permit wide local discriminations in specific cases. The latter policy has fortunately been already initiated by the opinion in the Louisville and Nashville case. Otherwise it would have needed but little foresight to predict grave inconvenience to the public and a speedy repeal of the law.

The Interstate Commerce act thus contains some serious blunders in the midst of many wise provisions. On the whole, it is a cheering sign of the determination to grapple with evident evils. To conclude that it will at once remove the chief abuses

would be far too optimistic. The condition of affairs will in most respects remain very much as it was. Personal discriminations at this moment are little, if at all, less frequent than before the passage of the law, and they will not be stopped by legislative authority. The main hope for the future lies in the further elaboration of the railway federations or traffic associations, to which most of the advance thus far made is ascribable, and whose complete history, never yet told, we must reserve for another time and place. Their importance, both past and present, has been phenomenally neglected. The value of the Interstate Commerce law, however, lies in the fact that it for the first time in our history subjects the railways to national supervision, and that it is designed to enforce a publicity and a responsibility which are the prerequisites to all healthy reform. The federal law is a tentative step, but a step in the right direction. It embodies the expression of a principle which is destined to remain and which is capable of a fruitful development. On this account it deserves a hearty welcome.

[The chief conclusions of this chapter have been confirmed by the history of the last forty years, and the enactment of the Transportation Act of 1921. The prohibition of pooling has finally been removed, and the old-time reliance on competition has been discarded, in part at least. The act has also provided the first step toward the districting of the field, or the division of the United States into a few great sections, with the amalgamation of the several hundred existing railways into twenty or thirty huge combinations. But that the law of 1921 is only a stage in the development is evident from two facts. In the first place the projected consolidations are still voluntary, although there is virtually no doubt that they will ultimately be compulsory, as has just been the case in Great Britain. Secondly, partial reliance on the idea of competition is still manifest in the project of having not one, but two, large systems in each of the geographical groups. When the present writer, as a member of the Transportation Conference at Washington in 1920 which hammered out the leading ideas and the details of the present law, called attention to this fact, he was met by the argument of the railway presidents and financiers that while competition in rates was indeed a thing of the past, competition in facilities was still needed in this country. This may be true as a practical proposition; but the history of railway development, as set forth in the preceding pages, leaves little doubt as to the weakness of the theory of competition in facilities and still less doubt as to the ultimate goal which will some day be reached in the United States as well. l

APPENDIX.

THE THEORY OF JOINT COSTS.

[This, with the exception of the last paragraph and some minor verbal changes, originally appeared in the *Political Science Quarterly*, vol. vii (1892), pp. 166-168.]

In the Quarterly Journal of Economics, vol. v (1891) Professor Taussig advances the theory of joint cost as the explanation of railway rates. While he does indeed make "no pretence of considering the problem of railway rates in all their bearings," he holds that the principle of joint cost is "one whose effects ramify into every part of a railway's operation." In especial he criticizes the emphasis put in the above pages on value of service and tells us on page 463:

"Surely it gives no real help toward solving the difficulties of the problem. It cannot mean that value is based on the value in use, or the intrinsic utility of the service. On that ground grain and coal presumably would be charged higher rates than silks and spices. If it means that value depends on the value of the service in the sense of its value in exchange, we are confronted with the obvious difficulty that the rates are the value in exchange of the service. The explanation thus simply says that charges are determined by what is charged; which does not much advance matters."

The theory of joint cost, applied to railways, seems to us partly a truism, partly a fallacy. It is of course an undoubted fact that in all competitive enterprises the price charged is fixed in the long run by, or rather at, the cost of production of all the products taken together, and that what is lost in one by-product must be made good in another. No one, so far as I know, has ever denied this; and it has been put forth time and time again as an answer to those who claim that every particular railway charge should be fixed by the particular cost of service. If that is called the theory of joint cost, it is a truism. It is referred to supra, pp. 185 and 202, where attention is called to average and total cost. But the attempt to make this the chief explanation of railway rates is erroneous, for the reason to which Professor

Taussig himself alludes, although only in passing. Prices are fixed by (or at) cost of production or by joint cost, only when the products are competitive products. There is always a marginal producer whose cost fixes the price, and who sells without profit. But in monopolies there is no marginal producer: there is no necessary conformity of price to cost at all. Prices may be continually above cost, the difference being the monopoly profits. Price in such cases is fixed by the principle of monopoly maximum returns, which is nothing but charging what the consumer can afford to pay. The charges in the monopoly product as a whole as well as in each item of the monopoly by-products will be put at the highest price consistent with greatest sales or profits, and may far exceed the cost of production, either individual or joint. Now a railroad is a monopoly; competition in charges is in the long run impossible. Railway charges therefore are fixed not by any principle of cost of production, individual or joint, but by the principle of monopoly profits, i.e., charging what the traffic will bear.

Moreover, the analogy to taxation, with its emphasis on the element of value of service or ability to pay, comes in as in the case of all monopolies of necessaries of life. Taxation indeed is compulsory; but payment for a monopolized necessary of life (like railroad charges in our present stage of civilization) is in one sense equally compulsory. The principle of charging what the consumer is willing to pay (or what the traffic will bear) in a monopoly obviously has reference to his ability to pay. The monopolist indeed is not primarily influenced by justice or by any other ethical consideration; but the price that he charges is none the less fixed by what the purchaser can afford to pay. Justice in taxation requires that a man shall pay in some proportion to what he can afford; the fixing of monopoly price depends on what he thinks he can afford. At bottom there is a real analogy between the two cases. This is the reason why at all times and in all countries government intervenes to supervise in some way the fixing of monopoly price, especially when the monopoly prodduct is a necessity of life.

Professor Taussig objects, in the above quotation, to the words "value of service" as an explanation of railway rates, and says that they cannot mean value in use, or intrinsic utility, because

grain and coal would then be charged more than silks and spices. This is, however, the old fallacy of asserting that value cannot depend on utility, because water has higher utility than diamonds. An acquaintance, surely possessed by Professor Taussig, with the modern Jevonian or Austrian theory of value, as dependent on marginal utility, should have preserved him from this obvious slip. When we say that railway rates are fixed by value of service, we mean that the marginal utility of the railway service influences its price, just as in general the marginal utility of the services afforded influences the price of all commodities. Marginal utility affects the demand side of the schedule; cost of production affects the supply side. But the influence of cost, whether individual or joint, is seen primarily in cases of competition; its sphere of action is far more restricted and indirect under the régime of monopoly.

Thus in reality Professor Taussig does not get to the bottom of the matter. Railway prices are simply an illustration of the general law of value, as it has been more recently explained by economic theory. Marginal utility is the basic explanation; cost of production is a variation of marginal utility in the case of continuous, competitive production. Translated into railway language, railway charges are fixed in general by value of service: only in so far as there is competition will charges in the long run conform to general cost of production; but even here each individual charge must still be fixed by value of service.

The theory of joint cost, accordingly, so far as it is true at all, is a subordinate explanation of a more general doctrine; and so far as the railroad is a monopoly, the theory becomes less and less true. The controversy will easily be avoided as soon as it is recognized that cost of service, or joint cost, is really a variation of value of service; and that the theory of marginal utility (which is nothing but value of service) is the fundamental explanation of all price.

In a rejoinder to the above criticism, Professor Taussig while significantly silent as to the subject of value of service still upholds the theory of joint cost, but now concedes that "railway rates represent not a simple case of joint cost, but one complicated by other economic factors." See Quarterly Journal of Economics, vol. xxi (1907), p. 163. Yet in his Principles of Economics

nomics (1911) Professor Taussig reverts to the same general theory, which has been uncritically accepted by some writers on railway economics, despite the fact that in the interval Professor Pigou had not only called attention to the inadequacy of the joint-cost explanation, as a result of railway monopoly, but had also discussed the value-of-service principle in a way quite free from the objections that attach to Professor Taussig's exposition. For Pigou's latest discussion see his The Economics of Welfare (1920), chs. xii-xv. Finally, it may be pointed out that in his admirable Studies in the Economics of Overhead Costs (1923), Professor J. M. Clark has shown the inadequate character of the entire theory of joint cost, whether applied to railways or to other industries.

CHAPTER SEVEN.

THE CRISIS OF 1907 IN THE LIGHT OF HISTORY.

[This originally appeared as an Introduction to the volume of collected addresses entitled The Currency Problem and the Present Financial Situation, New York, 1908.]

1. Crises in General.

In the attempt to contribute to the understanding of the crisis of 1907, and to lay down some principles which may be of service in the reconstruction of our currency system, the first question that will obviously present itself is as to whether the crisis of 1907 was primarily a financial or an industrial crisis.

From one point of view, indeed, every economic crisis in a financial crisis. Since values are expressed in terms of money, and since the modern business superstructure is erected on the basis of credit, every economic revulsion expresses itself through the medium of a change in prices; and since the bank is the center of credit operations, every crisis involves a revolution in the conditions of credit. From this point of view, all crises may be declared to be financial crises.

From another standpoint, however, a distinction may be drawn between financial crises proper and commercial or industrial crises in the larger sense. There may be a financial panic or crisis due primarily to temporary and sudden oscillations in the condition of the money market or in the price of securities. Such oscillations, sharp and sudden though they be, may have but little relation, whether of effect or of cause, to the general commercial and industrial interests. Of this character, for instance, were the original Black Friday in England, in 1745, and its namesake, the famous Black Friday in 1867 in New York, as well as many spasmodic fluctuations due either to political rumors like that which followed the Venezuelan Message of 1895, or to temporary speculative manipulations, like the Northern Pacific "squeeze" of 1901. Of a distinctly

different nature are those wider disturbances which are traceable to more general economic causes and which, even though they culminate in acute financial trouble, are followed by an industrial and commercial depression of more or less magnitude.

Into which category is to be put the crisis of 1907; and if in the latter, what were its causes?

At the outset it must be remembered that crises are essentially modern phenomena. We have had financial transactions, and that, too, on a large scale, for many centuries and in many civilizations. But crises, in contradistinction to temporary panics, have existed in England only since the middle of the eighteenth, and in other countries only since the beginning of nineteenth, century. The first crisis in England, barring the financial flurry connected with the South Sea Scheme in 1720, was that of 1763, followed by the minor disturbances of 1772 and 1783, and the more wide-spread convulsions of 1793, 1810, and 1825. The first crisis in the United States was that of 1817; and it was not until 1837 that we find the first international crisis, spreading from the United States to England and then to France. In Germany the period of important crises was ushered in even later.

Crises, in other words, are products of modern economic life. Modern economic life, however, has as its basal characteristic industrial capitalism, with the factory system and the newer methods of production for a wide market. This transition to modern industrial capitalism began in England in the latter half of the eighteenth century, was initiated in America in the first two decades of the nineteenth century, and took place on the Continent at a later date, last of all in Germany. The explanation of crises must therefore be sought in some feature of our modern capitalistic life.

The current explanations may be divided into two categories. Of these the first includes what might be termed the superficial theories. Thus it is commonly stated that the outbreak of a crisis is due to lack of confidence,—as if the lack of confidence was not in itself the very thing which needs to be explained. Of still slighter value is the attempt to associate a crisis with some particular governmental policy, or with some action of a country's executive. Such puerile interpretations have com-

monly been confined to countries like the United States, where the political passions of a democracy have had the fullest sway. Thus the crisis of 1893 was ascribed by the Republicans to the impending Democratic tariff of 1894; and the crisis of 1907 has by some been termed the "Roosevelt panic," in utter oblivion of the fact that from the time of President Jackson, who was held responsible for the troubles of 1837, every successive crisis has had its presidential scapegoat, and has been followed by a political revulsion. The crisis of 1857 helped to weaken the Democrats; the crisis of 1873 resulted in a popular majority for Tilden; the crisis of 1884 put Cleveland into the presidential chair; and the crisis of 1893, with the ensuing depression, brought the Republicans back to power.

Opposed to these popular, but wholly unfounded, interpretations is the second class of explanations, which seek to burrow beneath the surface and to discover the more occult and fundamental causes of the periodicity of crises. Here we find an interesting and progressive series of attempts to grapple with the difficulties of the problem. For a long time economists and business men advanced the theory of overproduction, forgetful of the fact that there really cannot be any such phenomenon as too much actual production of wealth. With the disappearance of this doctrine there came into prominence its variant. which put the emphasis on relative, rather than absolute, or universal overproduction, that is, the overproduction of some things and the underproduction of others. This theory also failed to command general assent, for the reason that no one could show in what respects there was any underproduction of wealth, or any lack of particular products during the years preceding a crisis. Others, again, have sought the causal fact in underconsumption, alleging that the larger consumption of wealth will in itself take up all the slack of production, and thus obviate a crisis. This explanation also is inadequate, because it overlooks the fact that the real falling off in consumption comes after the crisis has developed and not before: in fact. the period of prosperity which precedes a crisis is generally marked by a prodigious increase of consumption.

The socialists, again, seek to explain crises by the existence of private property in the means of production, and contend

that if we were to cease the exploitation of the labourer by the modern capitalistic methods, crises would disappear. While, however, agreeing in this general conclusion, they differ in their detailed analyses. Thus Rodbertus maintains that the secret of crises is to be found in the fact that the progress of industry causes a continually greater output of product, while the exclusion of the labouring classes from any participation in this increased productivity involves a relative diminution in demand. and thus ultimately a fall in price, culminating in a crisis. Marx, on the other hand, puts the emphasis on the fact that the necessary fall in the rate of profits (which, according to him, is a result of the surplus-value or exploitation theory) is incompatible with the greatly increased productivity of fixed capital inherent in the present system, and that the clashing of these two incongruous tendencies of modern industrial life brings about a relative overproduction of capital, and gives rise to periodical explosions. This view, finally, is sharply criticized by the latest and ablest of the socialist theorists, Tugan-Baranovsky, who in turn maintains that crises are due primarily to the fact that under the modern system it is impossible to invest the fresh accumulations of capital proportionally in all branches of industry, and that it is this relative disproportion of accumulated capital to the particular demand that causes the anarchy of the market and the recurrent convulsions of industry.

While the socialist scholars have undoubtedly made valuable contributions to the discussion of the problem, they, like the earlier economists, have erred in laying stress on the question of technical production rather than, as is done by the more recent economic thinkers, on that of business enterprise and capitalization. This is manifestly not the place to elaborate a general theory of crises. If we attempt, however, to give the bare outline of the more modern explanation, it would be approximately as follows.

The problem of crises or industrial depressions is one of relative capitalization. Under the present system of enterprise, production is carried on in mass for a prospective market, rather than as formerly in small quantities to fill a definite order. Even if it be contended that certain factories nowadays are busy with producing to order, it is none the less true that numerous

plants are continually being erected in the expectation that orders will be received in the future. The good times, or periods of rising prices, may be due to many causes-either in general to an augmented gold output, or in particular to the increase in the demand for some special product, whether in the iron industry through a new navy program, or in the clothing industry through the outbreak of a war, or in any other industry through a change of fashion or what not. Prices first rise in the particular enterprise, production augments, the movement spreads to other lines of business, and the new enterprises are financed by loans from the banks or trust companies, or by the sale of securities on a capitalization proportionate to the anticipated earnings. In times of buoyancy we are continually capitalizing anticipated earnings and future hopes, and we do this through the utilization of credit on a large scale. We build railways, put millions into steel plants, "boom" land sites, and form combinations of all kinds, employing the credit facilities granted by the banks, or throwing the securities on the stock market. We "water" the stock or, if that be forbidden by law, we drive the market quotations to a high point, because we think that this is warranted by prospective earnings. Sometimes we say that we capitalize the good will or, in the case of quasi-public enterprises, the franchise; but in all cases we capitalize the future, because we believe that we shall earn an income which will justify this capitalization.

The peculiarity, however, of an up-grade movement which rests on modern credit facilities is that we wear magnifying glasses or look at the future in too roseate a light. It is a natural tendency of human nature to capitalize one's hopes and expectations too liberally. If this is done on a continually larger scale, the capitalization becomes so great that actual earnings do not come up to our anticipations or the fear of a discrepancy between actual and estimated earnings begins to obsess us. It becomes necessary to reduce the capitalization to its true dimensions, i.e. to a sum proportioned to actual earnings. This process of readjustment of overcapitalized values obviously involves loss; but readjustment there must be. If the realization of its necessity is sudden, we have a crisis or panic. In the height of the period of exaltation or prosperity, something happens to dis-

turb confidence. A chance occurrence, a mere rumor, may suffice. Some bank considers its credit too heavily engaged, or suspects the adequacy of the collateral. Just at the flood of the tide, when new demands are constantly being made, it finds itself unable or unwilling to respond. Its refusal starts or intensifies the feeling of insecurity, and with the inability of some important concern to meet its obligations, a failure occurs and the crisis is precipitated. If, on the other hand, the situation is well handled, and if the readjustment of the overcapitalized values to actual earning capacity can be brought about more gradually, we have, in lieu of a crisis, a liquidation and a period of depression which lasts until the up-grade movement again sets in.

Crises, therefore, are not necessarily the result of increased technical production. The important point is not production, but capitalization. There may be overcapitalization, without overproduction. Overproduction of particular things may indeed accompany overcapitalization, but the stress must be laid, not simply on the relation between production and consumption, but on the discrepancy between the investment and its returns.

While the general features of a crisis are thus everywhere the same, the details differ in each case. Sometimes it is the banks that fail first, sometimes the general business enterprises. Sometimes it is the railway securities that first feel the strain, at other times "the industrials," and at still other times the raw materials. Sometimes the bolt comes out of the clear sky with prices at a maximum, sometimes it is only the last stage of a period of liquidation with progressively lower prices. But however unpredictable and seemingly inscrutable the actual course of events, the fundamental explanation is always the necessary readjustment of capitalization to actual earning capacity.

That this is true of all our crises can be seen from a hasty review. The crisis of 1817 was the result of the first utilization of modern capitalist methods in America. The period of the War of 1812 was marked by three facts: first, the industrial revolution in New England and the introduction of the factory system in the textile industry; second, the great development of internal improvements through canal and turnpike com-

panies; third, the sudden multiplication of banks to finance the new enterprises. The consequence was the so-called "Golden Age," which lasted for several years, until checked by the immense imports from England after the war, and destroyed by the collapse of the overcapitalized undertakings. It was well into the twenties before the country recovered from the industrial depression, and then came the second up-grade movement, which culminated in 1837. This was primarily a land and transportation, rather than a purely industrial, phenomenon. The canals and turnpikes in the East were now being replaced by railways, and the spread of slavery caused a rush of cotton planters, not only to the black belt, but to the pine barrens and hill country of the South. It was primarily land values that were being overcapitalized, and the process went on to such an extent that the annual land revenues of the government now exceeded the total governmental receipts from all sources of a few years before. Finally, to finance this land movement there were called into being hundreds of the "coon-box" banks, which found a champion in President Jackson in his war against the Bank of the United States. As the period of exaltation had been unexampled, so the collapse was proportionately great. The crisis of 1837, followed as it was by those of 1839 and 1841, was still more serious than that of 1817.

It was again wellnigh ten years before the readjustment of values had been completed. The following decade was in turn marked by five striking facts: first, the gold discoveries of California and Australia, which soon initiated a general rise of prices; second, the consummation of the revolution in the media of transportation by land and water, and the settlement of the entire Mississippi Valley, the most fertile portion of the continent; third, the abolition of the corn laws in England and the opening up of a market for our incipient surplus of wheat; fourth, the era of industrial invention which resulted in the application of capitalistic methods to new classes of enterprise besides the old textile industries; and fifth, the development of free banking with the "wildcat" institutions designed to provide the credit facilities for this prodigious overcapitalization. The crisis of 1857, which was the inevitable result, was perhaps still more acute than its predecessors. The continuance of its depressing influence on industry, however, was checked by the economic effects of the Civil War, which gave an artificial stimulus to many forms of enterprise.

In the period immediately succeeding the war, great changes again occurred. The transcontinental roads were completed and the Eastern trunk lines consolidated; the great wheat fields of the country were opened up under the new homestead laws, and the period of large exports began; the Bessemer process revolutionized the iron industry, and the factory system was now applied to boots, sewing-machines, and agricultural implements; the great copper and silver deposits were developed, and the petroleum output grew apace; while the greenbacks and the greenback movement fomented the process of inflation. The discrepancy between the capitalization and the actual earning capacity of the country's business enterprises again became so overwhelming that the necessary readjustment took the form of the convulsion of 1873—a convulsion the depressing effects of which were felt with almost increasing severity for six years.

The crises of 1884 and 1893 were both less intensive and more short-lived than their predecessors, for reasons which it is now not difficult to explain. The resumption of specie payments in 1879 was rendered possible, and was followed, by a series of abundant crops which revivified enterprise, and which were aided by the use of agricultural machinery on a large scale. The energy and the capital of the nation, however, were devoted in increasing measure to the transportation industry. This resulted in a perfect orgy of new railroad construction, the entire mileage of the country increasing in five years by fifty per cent. As the overcapitalization was primarily a railway overcapitalization, the resulting reaction of 1884 was essentially a railway crisis, leading to but indirect and temporary disturbances in industry at large. Within a year or two recovery was general, and the prosperous years from 1886 onward were reflected in the existence of a huge surplus of governmental rev-The live-stock and meat-packing business attained its high-water mark; the textile industries made great progress in the finer grades, and the ready-made clothing industry assumed vast dimensions; the iron and steel industry was revolutionized anew by the invention of the open-hearth process and the utilization of cheap ore from the Lake Superior region; the South was being quickly developed by the Northern capital that poured into the cotton mills and the coal and iron mines; electricity was applied to industry on an increasing scale, and the country took rapid strides in its evolution from an agricultural to an industrial community.

The movement of overcapitalization, however, was somewhat checked by two important facts: the downward tilt of world prices in general, which had been falling since 1873 and which were fast reaching their lowest point; and the relative shrinkage, not only in the amount of the wheat crop, but also in the value of both the wheat and the cotton crops. The resulting reaction of 1893, which was itself partly due to the ill-timed experiments with silver legislation, was as a consequence neither so profound nor so long-continued as its predecessors, since the discrepancy between anticipated and actual values turned out not to be so excessive.

2. The Crisis of 1907.

When we come particularly to the crisis of 1907, we find that the general causes were very much the same. The preceding decade has been characterized by the most unexampled prosperity in our history. The most striking initial cause is the prodigious increase in the gold supply. Whereas the annual average value of the output of gold was under one hundred millions in the first half of the eighties, and only a hundred and twelve millions in the second half, it has grown with such enormous strides that during the past two years it has reached an annual value of about four hundred millions. The result has been a constant rise of prices from the minimum level of 1896. The rapid accumulation of gold, much of which went into the bank reserves. enabled the financial institutions to expand their credit facilities many fold, and as a consequence enterprise flourished in every direction. During the last decade the record crops of cereals and cotton, the extension of dry farming, the effects of irrigation on fruit culture, the development of truck farms, and the unparalleled increase of immigration led to a remarkable enhancement of land values throughout the length and breadth of the land; the output of coal doubled, that of petroleum more than doubled, and that of pig iron, as well as of steel, actually trebled; the huge combinations of capital, now spreading to every form of enterprise, effected prodigious economies and revolutionized business methods; and the transition from the agricultural to the industrial phase of our economic development proceeded with unlooked-for celerity. Values were pushed up on all sides and the hopes of a prosperous community were capitalized with a recklessness born of unbounded faith. The pace was too rapid; the reaction was bound to ensue. In the late autumn of 1907 the revulsion was precipitated, with all the familiar accompaniments of an acute panic such as the collapse of several financial institutions, the sudden curtailment of loans, leading to the failures of some prominent business concerns, the hoarding of money, the appearance of a premium on currency, going to over three per cent, and the frantic efforts of the financiers to relieve the situation by the importation of gold, the issue of clearing-house certificates and the interference of government through the dubious expedients of the placing of a new bond issue and the emission of Treasury loan certificates.

The crisis of 1907, however, is on the whole not comparable either to that of 1857, or to that of 1873, for reasons which have thus far perhaps not been adequately discussed. These reasons may be classed under five heads.

In the first place, the very magnitude of the country's resources has been a favourable factor. The unparalleled prosperity of the past decade has made possible the accumulation of a vast reserve in the case, not only of the great corporations, but also of the average business man. This reserve has acted as a buffer to the shock of reaction, and has softened the impact through a speedy restoration of confidence in the excellence of the country's assets and in the real solvency of business.

Secondly, the crops, while not those of a bumper year, have been large and valuable. It is significant that almost each of our great crises in the past has been preceded either by the failure of the harvest at home or by the existence of such a bountiful output abroad as greatly to reduce agricultural prices. It must be remembered that, notwithstanding recent developments, this country is still primarily agricultural, and that upon the varying extent of our staple crops depends in large measure the effective demand which sets and keeps in motion the wheels of business activity. By a fortunate coincidence, the crisis was attended by a phenomenon which in ordinary times would have spelled prosperity, and which in this extraordinary conjuncture helped to bring back normal conditions.

In the third place, the overcapitalization of values was somewhat less conspicuous than hitherto in our greatest industrythat of transportation. Some of our former crises have, as we know, been brought on primarily by the speculative building of railroads. But whereas in the early eighties the annual increase of construction reached ten and eleven thousand miles, during the past five years, with a railway system three times as large, the annual increment of new construction was only four or five thousand miles. The consequence has been that with the rapid upbuilding of the country the railways have grown up to their capitalization, until it is now reasonably certain that there has been for some little time scarcely any actual overcapitalization. A striking proof of the absence of any real discrepancy between normal values and the capitalization of actual earning capacity is afforded by the recent congestion of traffic: and even with only normal business activity it is computed that, in order to prevent this congestion in future and to maintain the railways at a reasonable standard of efficiency. there will be required an annual investment of over a thousand million dollars.

Fourthly, the crisis of 1907 was preceded by a period of gradual liquidation. General prices of commodities, with a few notable exceptions like that of copper, were indeed high until wellnigh the outbreak of the panic. But the prices of securities had for some time undergone a marked shrinkage. Some, quite mistakenly, attribute this shrinkage to lack of confidence engendered by the governmental policy toward industry; others, with equal readiness and no less extravagance, ascribe it to the distress caused by the exposures of the methods of "high finance" in positions of trusteeship. In reality, however, the depreciation in securities was caused chiefly by the rise in the rate of interest. In fact the one phenomenon is really the other; for where earnings remain unchanged, the capitalization of the earnings depends on the rate of interest. If it be objected that

the price of stocks fell because of the apprehended decrease of future earnings, due to lack of confidence, the retort is obvious that this would not suffice to explain the equal or still greater fall in the capital value of bonds, private or public, with a fixed rate of interest. The depreciation was not national, but interna-

tional, in character; and it applied not only to our railway and

industrial securities, but to the English "Consols" as well. The rise in the interest rate, which explains the fall in the capital value of securities, was due to several causes. First and foremost is the increase in the gold output. For, as is now well established by economic theory and reinforced by the observations of practical men, while any increase in the supply of loanable funds on the call-money market temporarily reduces the "money rate," an increase in the general supply of standard money in the community, on the contrary, raises not only the price level of all commodities, but the price for the use of capital, which we call the general rate of interest. The increase of money as the standard of value inevitably tends to increase the general rate of interest. Again, since the rate of interest is always adjusted to the earnings of the fund of capital at the margin of its employment, the rate of interest has risen because there has been relatively less capital available for employment. The fund of free capital has been rapidly diminishing during the past few years. Hundreds of millions were destroyed in the Boer and Japanese wars; hundreds of millions more disappeared through the destruction of San Francisco and Valparaiso; and countless millions in addition have been utilized to finance the more or less dubious schemes which have sprung up in all countries during the years of prosperity. Even though there was no great overcapitalization of railroads and even though many of the industrial enterprises were really legitimate, the discounting of the future was not quite ample, and the capital was invested more rapidly than the immediate returns would warrant. The replacement fund, in other words, was neither quite large enough nor quite active enough; and with the gradual exhaustion of the available free capital, interest rates necessarily rose and security values as a consequence fell.

The period of liquidation was thus a fortunate event. By

checking the movement of exaltation and preventing the level of prices from being so extreme, it kept the reaction from being so great. Where the crest of the wave is lower, the shock of its break is less. Had the ascent of prices and values gone on unhindered, the convulsion of 1907 would have been far more severe. From this point of view, even those who mistakenly persist in ascribing the lack of confidence to the President ought in reality to be grateful to him; for to the extent that he may be said to have superinduced the liquidation of the spring and summer, he assuredly contributed to mitigate the shock of the inevitable reaction in the autumn.

The fifth cause of the lesser magnitude of the crisis is the development of trusts. Until we attain the right perspective, it is always difficult to get a correct view of the far-reaching changes which are taking place under our very eyes. Especially true is this of such a veritable revolution as is typified by the modern concentration and integration of industry into the vast combinations known as trusts. There are indeed many disquieting and untoward symptoms in this development, of which the present is not the place to speak. But as against the undoubted perils of what we are all now coming to recognize as an inevitable process, we sometimes forget to put at least one countervailing advantage which is of especial importance in this connection. The modern trust, as typified in its most developed form by the United States Steel Corporation, is apt to exert an undeniably steadying influence on prices. Precisely because of the immense interests at stake, and the danger of a reaction, the trust with its consummately able management tends toward conservatism. As compared with the action of a horde of small competitors under similar conditions, it is apt during a period of prosperity to refrain from marking up prices to the top notch, and is likely to make a more adequate provision for the contingencies of the market. With this greater moderation is apt to be associated a more accurate prevision, which succeeds in a more correct adjustment of present investment to future needs. The drift of business enterprise in its newer form is thus toward a relative checking of the discrepancy between estimated and actual earnings or, in other words, toward a retardation in the process of overcapitalization. The history of trusts is still

too recent, and in not all of them are we yet able to discern the working out of what ultimately will come to be recognized as the real laws of their evolution. To those, however, who comprehend what this revolution in business enterprise really implies, it can scarcely be doubtful that the fruit of this steadying influence and of the better adaptation of the present to the future is already perceptible. Notwithstanding the quite unexampled prosperity of the last decade, the tempo of overcapitalization has been relatively less rapid and the process of readjustment throughout the world of enterprise has therefore been less extreme. Industry has slackened rather than collapsed, and the disturbance itself has been comparatively short-lived, with the prospects of an early rebound. The influence of trusts in moderating crises and in minimizing depressions will doubtless become more apparent with each ensuing decade in the history of modern industry.

While the general causes which are responsible for the crisis of 1907 have been recounted above, there still remains one point of fundamental importance. If we compare our economic history with that of Europe, we observe that acute financial crises have there almost passed away. England has had no severe convulsion since 1866, and in France and Germany also the disturbances are more and more assuming the form of periodic industrial depressions rather than of acute financial crises. The responsibility for the continuance in this country of a phenomenon which is in large measure vanishing elsewhere rests beyond all peradventure of doubt on the inadequacy of our currency system. While defects have frequently been pointed out we are coming to realize that among its fundamental shortcomings even more important than the inelasticity of our note issue is the decentralization of the bank reserves. Along these lines lies the needed reform; and with its accomplishment the purely financial crisis will tend in the future to become less acute. The struggle which has been victoriously fought out everywhere else must be undertaken here in earnest and with vigour.1

¹[The reform movement, hinted at in the above pages, was soon set in motion, and resulted in 1913, in the passage of the Federal Reserve Act, the fundamental feature of which is the centralization of reserves.]

CHAPTER EIGHT.

THE IMMIGRATION PROBLEM.

[This originally appeared as an Address before the Academy of Political Science in the City of New York in 1923 and was published in the Proceedings, vol. x, 1923.]

1. Immigration in the Past.

The immigration problem is almost as old as immigration itself; and that means, in American history, almost coterminous with the settlement of the country. For the peopling of the continent has been well-nigh from the beginning due to immigration, rather than to the natural increase of those already within the country. A few figures as to the population may be here recorded.

In 1640 the population of all the colonies was 25,000, composed in overwhelming mass of immigrants. In 1660 the population had increased to 80,000; and in 1689 to about 200,000. The half-million mark was passed in 1721; the million mark in 1743; and the two-million mark in 1767. At the outbreak of the Revolution the population numbered about two and one-half millions. When the first census was taken in 1790, the population, exclusive of Vermont and of the territory northwest of the Ohio, was a little short of four millions, or, in exact figures, 3,929,000. From 1790 to 1820 the immigrants numbered about a quarter of a million; in the early twenties the annual influx of immigrants was about ten to twelve thousand; in the late twenties. about twenty thousand. In 1837, just before the panic, the annual immigration was 79.000. By 1842 the figures of annual immigration had reached 100,000; by 1854, 428,000. Then, owing first to the bad times and afterwards to the war, the figures fell off, increasing again subsequently until in 1873, just before the panic, immigration equalled 459,000. Thereafter the high and low-water marks of annual immigration varied with good and

bad times. By 1882 the high-water mark was reached at 789,000. It was not until the present century that the annual immigration exceeded a million, the net increase in 1907 being 1,050,000. The gross immigration in that year was 1,285,000, a figure almost attained again in 1914 when the gross immigration was 1,218,000; although in that year the net increase was only 769,000.

The immigration, moreover, almost from the beginning, came from widely diverse stocks. This was especially true in the middle colonies. When Father Jogues visited New Netherlands in 1644 he found that eighteen different languages were spoken in Manhattan. In New Haarlem, in 1661, the male population consisted of Frenchmen, Walloons, Dutchmen, Danes, Swedes and Germans. In both the northern and southern colonies during the eighteenth century the English-speaking immigrants, who now felt themselves native Americans, began to express apprehension at the foreign influx. In his Observations on the Increase of Mankind, Benjamin Franklin wrote in 1751:

Why should the Palatine boors be suffered to swarm into our settlements and by herding together establish their language and manners to the exclusion of ours? Why should Pennsylvania, founded by England, become a colony of aliens, who will shortly be so numerous as to Germanize us instead of our Anglifying them?

A few years later he writes:

The Germans who come hither are generally the most stupid of their own nation, and as ignorance is often attended with credulity when knavery would mislead it . . . it is almost impossible to remove any prejudices they may entertain. . . . Not being used to liberty they know not how to make a modest use of it. [And he expresses the fear] that they will soon so outnumber us that all the advantages we have will not be able to preserve our language and even our government will become precarious.

In his *Notes on Virginia*, first printed in 1782, Jefferson similarly expressed his serious doubts in the following passage:

The present desire of America is to produce rapid population by as great importations of foreigners as possible. But is this founded in good policy? . . . Are there no inconveniences to be thrown into the

¹ Father Jogues, Novum Belgium in Jameson, Narratives of New Netherlands, 1609-1664 (1909).

Works of Benjamin Franklin, ed. by John Bigelow, 1887, vol. ii, p. 233.
Letter to Peter Collinson, May 9, 1753, in Works, vol. ii, pp. 297-299.

scale against the advantage expected? . . . Our government is a composition of the freest principles of the English constitution, with others derived from natural right and natural reason. To these nothing can be more opposed than the maxims of absolute monarchies. Yet from such we are to expect the greatest number of emigrants. They will bring with them the principles of the governments they leave, imbibed in their early youth; or, if able to throw them off, it will be in exchange for an unbounded licentiousness, passing, as is usual, from one extreme to another. It would be a miracle were they to stop precisely at the point of temperate liberty. These principles with their language they will transmit to their children. In proportion to their numbers they will share with us the legislation. They will infuse into it their spirit, warp and bias its directions, and render it a heterogeneous, incoherent, distracted mass.¹

And many years later he asks "whether it is desirable for us to receive the dissolute and demoralized handicraftsmen of the old cities of Europe." ²

The apprehensions of Franklin and Jefferson turned out to be unfounded and exercised no influence on legislation. But at periodic intervals thereafter the anti-immigration fears revived and even assumed a political form. The thirties of the nineteenth century saw the development of the Native American or Nativist movement which was at first directed against the English, then against the Irish, and finally against the Germans. In a letter addressed in 1837 to Aaron Clark, Mayor of the City of New York, by an anonymous writer who signs himself "A Native," an appeal is made to protect the Americans from the English as well as the Irish immigrants. "Let our country be an asylum of oppressed humanity, but not a depositary of base and bad men." The author asks his fellow citizens: "Are you willing to risk your independence to indulge your philanthropy?" He tells us that "our lands under the culture of foreigners will yield but little more than half as much as under our own husbandry." "Even the English," he informs us, "if they are more tasteful than the Irish can never deviate from the precise customs of their country." He calls attention to all their evil characteristics, pointing out that the natives' "children as they walked the streets on their ordinary business were exposed to

¹The Writings of Thomas Jefferson, ed. by Paul L. Ford, 1894, vol. ii, pp. 189-190.

Letter to Lithgow, Jan. 4, 1805, in Works, vol. ii, p. 270.

smallpox, cholera, and other diseases from large squads of the most loathsome of the human race." He concludes that

the most distressing sight that ever blasted the eyes of a child is to behold the mansion of his ancestors and the place of his birth in the possession of those who first came under the hospitable roof for protection and aid. Are we not in a fair way to witness this ourselves?

The anti-foreign feeling led to riots in New York City in 1834, in Boston in 1837, and in Cincinnati about the same time.

In the next decade Jesse Chickering called attention to the "danger of important changes in the very structure of society" from the increasing immigration. "Ought not we as a people to feel a deep solicitude lest the institutions left us by our fathers fail of being transmitted unimpaired to our children?" ²

In the fifties the anti-immigration movement took the form of "Know-nothingism," which was largely tinged by anti-Catholic prejudice. It is amusing to note, however, that then, as at later periods and even at present, the experience of the past was disregarded and that the objectors considered the dangers to be entirely new ones. Thus in a speech in Congress in 1854 in defense of Americanism the orator tells us that:

in the early history of immigration those who sought an asylum among us were for the most part hardy and industrious mechanics, artisans, and labourers. But now the character of the immigrants is totally changed. Instead of men of high character, of honesty and integrity, the refuse of jails and prisons annually pour their thousands upon our shores in one fœtid stream of corruption and villainy.*

Mr. Sollers had evidently forgotten all about the dissolute and demoralized handicraftsmen of whom Jefferson had complained but especially about the convicts, thousands of whom were transported to Maryland and Virginia in the eighteenth century. It would be easy to match his complaints from the literature of the preceding hundred years.

The "Know-nothing" movement, like its predecessors, disappeared in the face of the imperious need of immigrants to help build up the man-power of the country. The argument which

¹To Aaron Clark, Mayor of the City of New York (1837), pp. 3, 5, 7, 11, 16.

³ Jesse Chickering, Immigration in the United States, Boston, 1848, p. 66. ³ Speech of Honorable Augustus R. Sollers of Maryland, on the subject of Americanism, 1854, p. 4.

won the day is perhaps best expressed by Edward E. Hale in his discussion of Irish immigration in 1852. He concedes the inefficiency of the Irish:

The pure Celtic race has done nothing positive for mankind and has been nothing but a monumental failure. I cannot recall any master work of art, of science, of politics, of religion, or of letters which the world owes to it. . . . It has been of the greatest value as a race crossed in with other races.

But that, in Hale's view, is the strongest argument in favour of their immigration. He continues:

If this were a superior race, a race of superior ability, coming in on us, we might well complain. They would be sure to rise above me and mine and crush us down. . . . But this is not true. We are here, well organized and well trained, masters of the soil, the very race before which they have yielded everywhere besides. It must be, that when they come in among us, they come to lift us up. . . . Their inferiority as a race compels them to go to the bottom; and the consequence is that we are, all of us, the higher lifted because they are here.

In other words, the immigrants will do all the manual labour and "the simplest drudgery of factory work" and the natives "are simply pushed up into foremen, superintendents, machinists, inventors, teachers, artists, etc.; filling classes of society some of which we could not have else had so well, some of which we could not have had at all." ¹

2. The Arguments.

The arguments, new and old, against immigration, may be classed under five heads.

First come the religious arguments. These were specially strong in the "Know-nothing" movement of the fifties, directed against the Catholics and now being resuscitated by the Ku-Klux Klan who add the Jews to the Catholics. The second set are the political arguments. These were originally advanced, as we have seen above, by Franklin and Jefferson and have in recent times taken the form of opposition to the reputedly dangerous radicalism imported from abroad. It needs but little perspicacity to

¹ Edward E. Hale, Letters on Irish Immigration, Boston, 1852, pp. 54 et seq.

realize that the modern argument is almost as weak as that of the eighteenth century, which was soon belied by experience.

The third class are the social arguments. In former decades these assumed the indefensible form of making the immigrant responsible for the existing pauperism and crime, as well as for the regrettably overgrown cities. In recent years, although we hear something of the same arguments, the more modern version is what might be called the race-suicide argument; the birth-rate among the American stock being much inferior to that among the immigrants.

The fourth category are the economic arguments. The chief version was that the unchecked influx of unskilled labour tended to keep wages from rising, especially as it seemed to be more difficult to form trade unions among the unskilled immigrants. It was not unusual, even, to connect unemployment with immigration. Even to-day this argument plays a significant rôle, although its force has been largely attenuated in the past by the conviction that the wealth and prosperity of the country as a whole were increased by immigration.

The fifth class may be called, for lack of a better term, the racio-cultural arguments, based upon socio-biological reasons. This has assumed its most striking form in connection with the Chinese and Japanese immigration and is based upon the irresistible desire to maintain racial purity. Our fellow-citizens on the Pacific slope object to Oriental immigration not so much for economic reasons—although these have played their rôle—as for racial reasons. We have been repeatedly told that there is no objection to the Chinese and Japanese on the ground of a lower civilization; on the contrary, it has often been conceded that they have a civilization in some respects superior to our own. But when all is said and done, it is indubitably a different civilization, and it is the difference, rather than the inferiority or superiority, which is the controlling factor in the opposition.

More recently a similar argument has been urged against a certain portion of European immigration and an attempt has been made to distinguish between the so-called old and the new immigration. The same reasons, however, that are now advanced against the Italian, the Greek, the Hungarian and the Jew, were formerly alleged in turn against the English, the Irish, the German and the Scandinavian. The fears that are now expressed with reference to the "Mediterranean" races as against the very races that constitute the to-day so highly prized "Nordic" stock were emphasized in the same way a half-century and a century ago. In the past, however, these fears were soon belied by the marvellous power exhibited by the American nation in assimilating and reducing to a common denominator the different branches of the common white stock. The present movement is due to the recrudescence of Americanism and nationalism which has periodically played an important rôle in our country ever since the exposition of the so-called "American system" by Henry Clay in 1816. It finds its support in a spurious anthropology which is rejected by all competent scientists.

It is indeed true that embarrassments have occasionally arisen in the past from the existence in this country of foreign-born citizens who have attempted to re-echo here some of their old-world prejudices. From the time of the alien and sedition laws shortly after the inception of our present government, through the period of the twisting of the British lion's tail by our Irish co-citizens at various periods of the nineteenth century, down to the recent activities of some of our German fellow-citizens, the attempt has not infrequently been made to modify the assumedly strictly American policy by utilizing these extraneous influences. At the present time, with the distracted state of European politics, the differences of opinion among our foreign fellow-citizens will no doubt continue to be manifested. But history has shown us that these fears and embarrassments may be much exaggerated and that the danger, if it exists at all, is essentially ephemeral; for it is an undoubted fact that the first generation of the children of foreigners become even more American than the Americans themselves. As a real menace to the perpetuity of American institutions, therefore, there is little to be apprehended. present movement of exaggerated Nativism or Americanism or Ku-Kluxism will almost surely go the way of its predecessors. This is all the more true in the degree that we may hope for a gradual return to normal of the actual European situation.

The real significance of the present attitude to immigration, apart from the anti-oriental movement, is to be sought else-

where. The fundamental distinction between the present and the past is the outstanding fact that now for the first time in our history the safety valve of the frontier and of the free public domain has disappeared. It is possible, indeed, that the irrigation and drainage movements of the next few decades may add thousands of acres to our arable farm lands and thus again strengthen the movement which, in the past, overcame all the objections to immigration and which helped to build up our great empire. But in the main and especially with the transition of the United States from an agricultural to an industrial community, the problem is at bottom becoming more and more an economic problem. Do we need a continually increasing labour force to man our growing industrial establishments? Or shall we look forward to a slower development like that of Australia or even to a static condition like that of France? That we can have prosperity under either static or dynamic conditions is undoubted. But the tempo of the development would be different in the two cases.

It is indeed probable that in the present unfortunate condition of the European countries a totally unrestricted immigration would so swell the hordes of newcomers as to lead to an economic indigestion and to exert an unfavourable influence on the progressive rise of wages and the improvement in the standard of life. which have been the characteristic marks of American labour progress during the past century. Some form of self-protection may reasonably be demanded, unless we are prepared for a greater equilibration between American and European wages, which would mean, for the time at least, a leveling down of our scale of remuneration rather than a leveling up of the European scale. But in view of the fact that, even at a very reasonable computation, we can comfortably take care of a population of three or four hundred instead of one hundred millions, it seems hazardous to contend that the time has now arrived when we should adopt as a permanent policy the shutting off, or even the drastic restriction, of European immigration. A moderately selective immigration is perhaps advisable for the immediate future, but the selection should take place abroad and not here. Above all, however, after the present, and let us hope temporary, wave of so-called hundred-per-cent Americanism has had its day, to

fade away like its similarly ephemeral predecessors and like the analogous movements of exaggerated nationalism abroad, we shall be in a position to approach the problem in the proper spirit and to discuss it from the really significant point of view, that of the lasting economic interests of the community as a whole. The maintenance and improvement of the American standard of life form indeed the paramount considerations; but it is perhaps open to question whether these will not in the long run be furthered rather than hampered by the augmented opportunities for high-grade employment which may properly be associated with an increasing and socially-minded industrial prosperity.

CHAPTER NINE.

ECONOMICS AND SOCIAL PROGRESS.

[This was the Presidential Address at the meeting of the American Economic Association, 1902. It was printed in the Papers and Proceedings of the Fifteenth Annual Meeting.]

1. Introduction.

Economic science is an outgrowth of economic conditions. It is a product of social unrest. From the earliest discussions of classical antiquity, from the first faint glimmer of truth in mediæval speculation, from the elaboration of complete systems of thought in the eighteenth century, down to the recent renaissance of scientific enquiry in the western hemisphere, each step forward in economic analysis has been the result of an effort to solve the difficulties of the existing industrial society. Consciously or unconsciously the teleological element has presided at the birth, and has accompanied the growth, of all social speculation. "What ought to be" has ever been the spiritual father of "what is."

It is not intended, of course, to deny the existence of the independent search for truth for its own sake. On the contrary, in economics, as in every other scientific discipline, the highest flights of the intellect have been in the tenuous and serene atmosphere of pure reason, far above the turbid waves and windy surface of every-day discussion. It would ill behoove us to say aught in disparagement of the fearless quest for truth for its own sake. Amid this onward sweep of material progress and this tidal wave of mere brutal bigness which threatens to engulf us all, nothing is more needed than to cling to the stake of principle and to hold fast to the sheet anchor of unprejudiced and undaunted conclusion. The so-called theorist has a heavy and often undeserved load to bear. The term is redolent of condescension; it smacks of contempt. And yet, if the theory is what the

word implies, if it is a real exposition, a true statement of the necessary relations between facts, then no matter by what method it has been reached, no matter how unlikely it may seem or how unwelcome it may be, it rests upon a bed of adamant and will endure forever. To seek such an explanation, to attain such a result needs not only the most unremitting ardour, but often the most intrepid resolution.

The point, however, that it is desired to emphasize here is that the facts of which an explanation is sought must be chosen with discrimination. If the facts themselves are really insignificant, the theory, no matter how true, cannot fail to be trivial. The minor writers on economics have, unfortunately, far too often dissipated their energies on such trivialities and have, as a consequence, sunk to the depths of scholasticism and mere logomachy. If economics is to be of any real service, it must deal with the important phenomena of economic life. The great thinkers in our domain, however elevated their view, however recondite their processes of thought, have always stood on the firm foundation of basic social relations. To whatever extent, for instance, we may be tempted to disagree with the methods or the conclusions of Ricardo, there is no doubt that the problems which engaged his attention were entirely worthy of so acute and so profound a mind. However abstract the mode of treatment, however unfinished or fragmentary the results, however remote the argument from the habitual and narrow considerations of the market place, the topics in which the great economists of the past delighted were of a vital and engrossing character, and constituted the real core of the controversies of the day.

If, then, economic science finds its justification in the significance of economic facts, if it owes its origin and its fruitful development to the storm and stress of actual life and to the inharmonious play of social forces, it may be worth while to consider somewhat more closely the relations between economic thought and social progress.

In the first place we must emphasize anew the essential relativity of all economic thought and all political doctrine. The philosopher indeed loves to elaborate the eternal principles of order and harmony, and seeks to give all mundane things their fixed place in the cosmic scheme. With this the economist has no quarrel. His work is the less ambitious one of seeking to put various phases of the social activity of man in their due perspective, to estimate the real import of the economic motive in its actual working out amid the myriad manifestations of the social mind. In the narrower controversies as to the nature of economic law, the battle between absolutism and relativity has been virtually won. Most thinkers are now willing to concede that however accurate may be the conception of inviolable law and however legitimate may be the inclusion of economic principle in this category, the law holds good only so far as the conditions remain constant. With the perpetual change in at least some of the relations of social life, the economic law is often applicable only to the particular stage of industrial development, and becomes a provisional and relative, rather than an absolute, explanation. But while the principle of relativity is now widely recognized, many implications of the older theory still survive, and continue to exert a baneful and constricting influence.

Take, for instance, the opinion either explicitly or implicitly shared by many of our thoughtful fellow citizens that this country has in some way a distinctive mission to perform, and that we are marked off from the rest of the world by certain inherent principles, relative indeed, in the sense of being peculiar to America, but eternal and immutable in their relation to ourselves. Now we certainly do not desire to depreciate the advantages of patriotism, or to impeach the unquestioned influence of nationality. Nations, like individuals, differ from each other in countless respects, and each has doubtless some peculiarity of endowment which is lacking in the other. Rivalry between nations, like competition between individuals, is an essential factor of all social progress. The friction of commercial and intellectual intercourse, notwithstanding the sanguinary struggles by which it has often been attended, has proved to be the most potent influence in generating and spreading the light of civilization. To disparage the facts and the force of nationality were futile indeed. And as with nationality, so with patriotism. Nations, like individuals, must respect themselves if they desire to be respected by others; and if they seek to accomplish anything enduring, they must have an ardent faith in their own strength and in their own powers of progress.

2. The Influence of Economic Life.

But how often are the claims of nationality pushed to an extravagant and unwarrantable length! We have indeed learned to put in their proper setting the contentions of the "chosen peoples"; and we regard the attitude of the ancient Jews and of the classic Greeks toward gentile and barbarian respectively as the perfectly explicable, but none the less culpable, result of an overweening pride and vainglory, buttressed in the one case by the all-pervading power of religion, and in the other by the fanciful supports of ancestry. We can with difficulty repress a smile of amusement when confronted to-day by the rival demands of those mighty monarchs who still profess to rule by "the grace of God," and who are unwilling to submit their differences to the arbitrament of anything less than the "manifest destiny" of their own flesh and blood. We are even ready at the present time in the matter of international morality to concede that while there is a beam in the eyes of our neighbours, there may possibly be at all events a mote in our own.

When, however, we come to a consideration of economic phenomena and their influence on our social and political fact and theory, we do not recognize that we have been largely living in a fool's paradise. We think with complacency that there is something inherent in our democracy; we look back upon the achievements of our colonial struggles as the obvious consequence of the Puritan character; we congratulate ourselves upon our love of liberty, our inventive ingenuity, our unexampled prosperity. What we do not see is the essential relativity of all these phenomena.

New England indeed developed its democracy and its town meeting. But the town meeting had its prototype in the woods of Germany, on the steppes of Asia, and in fact in all primitive assemblages; while the democracy was the result, not of the Puritan ancestry, but of the economic conditions. The Puritans had nothing to do with the beginnings of democracy in the mediæval communes, or with its development amid the Alps of

Switzerland or the dunes of Holland; and the same Puritans were unable to put on a firm foundation at home the democracy which they easily established in the new world. So it is with the love of liberty and individualism. Liberty is always the concomitant of economic equality, or at all events of the equality of economic opportunity. When this equality was almost from the outset excluded, as in the South through the pressure of an economic environment based on an abundance of free soil, well suited to an extensive and quasi-tropical tillage, the result was a disappearance of liberty for all but the governing class. It took but a few generations for the sturdy and liberty-loving patriots of England and Scotland to become sincere and devoted believers in the necessity and the beneficence of slavery.

The so-called Anglo-Saxon love of liberty went the way of the old Roman boast of freedom when the world conquests, with their supply of fresh land, made slavery an economically profitable system. What a ghastly mockery that the proud assertion in our Declaration of Independence as to all men being born equal and with the natural right to liberty should be signed by so large a proportion of slaveholders!

And what shall we say of the boasted Anglo-Saxon individual-How does it happen that the Englishman, leaving his moist and fertile home for the arid and barren wastes of the antipodes, becomes, if not a socialist, at all events the next remove to one? Why is it that in Australasia we find the government railroads, and the government insurance, and the government steamships, and the government frozen-meat industry, and the dozen other examples of government activity which would be greeted with dismay in the mother country? Is it not clear that the individualist theory in America is the product of definite economic conditions in the nineteenth century? What careful interpreter of American history does not know that the arduous struggles with a rebellious soil and an inhospitable climate caused the American of a century ago to turn to government whenever he thought he might secure help? State roads, state canals, state railroads, state bounties, state enterprises of all kinds suited to the needs of the settlers were the order of the day. But when the mountains had been crossed and the fertile valleys of the Middle West had been reached, there came a wondrous change. Conscious of their new opportunities, the citizens now desired only to be left alone in their quest for prosperity. Private initiative replaced government assistance, and the age of corporations was ushered in. Insensibly the theory of governmental functions changed, and the doctrine of laissez faire carried all before it. Never before and in no other country did the theory of individualism take such hold of an entire people, because never before had the economic conditions been quite so favourable.

And at the same time individualism was reinforced by democracy. Colonial New England was indeed a democracy; but toward the end, owing to a changing economic environment, we notice the traces of an aristocratic development, culminating here and there in the dependence of suffrage itself on property qualifications. But now the broad plains and fruitful valleys of the Middle West, amid which slavery was economically unprofitable, and therefore politically impossible, produced an environment so favourable to democracy that its influence soon spread throughout the entire North. It was this combination of democracy and individualism which slowly became strong enough in its economic basis to throw down the gauntlet to the opposite economic system of the South, and finally to emerge victoriously from the contest.

With the unification of the system and the supervening change of economic conditions, the content of our democracy is changing and the theory of extreme individualism is passing away.

Is it not clear, then, that there is nothing inherent in the fundamental characteristics of our Puritan past? Must we not recognize the fact that the history of colonial New England is but an episode in the drama of humanity, a mere interlude in the play of society? Its strength and weakness alike are the results of a contact between a fairly civilized mental attitude and a primitive economic environment. In such a contact the environment in the long run becomes the potent factor. American history, therefore, has been the history of national infancy. To predict a future which shall be a necessary development from our early past would be as childish as to explain the conditions of Roman imperialism from the facts of the pre-republican age. While the stubborn racial characteristics must indeed not be over-

looked, the American of the future will bear but little resemblance to the American of the past. To forecast the coming social transformation in our country without bearing in mind the fundamental change in the economic conditions were puerile indeed. (Relativity, not absolutism; change, not permanence, is the watchword of all social, political and ethical progress.

3. The Lessons of Economic Interpretation.

An economic analysis based on changing conditions is therefore of the utmost possible service. And if conducted skillfully it would, I feel convinced, bid us be of good cheer and help us face the future with hope and confidence. The fundamental problem connected with social development is after all this: Whither are we tending? What lessons have an economic interpretation of the past and of the present to teach us in our guidance for the future? What are the forces that are making for progress or retrogression?

There is no blinking the fact that many give a pessimistic answer to these queries. They call attention to the increase of luxury and of materialism. They look with suspicion upon what they term the growing plutocracy and the new feudalism. They point to the warning example of the oriental monarchies of classic Greece and Rome, and tell us that in our case, too, the period of unquestioned prosperity which is now upon us will inevitably be followed by one of decay and final dissolution. What has been, will be. There is nothing new in human affairs.

We venture to affirm, however, that a more discriminating study would disclose the existence of several factors inattention to which is largely responsible for this gloomy and despondent attitude, and that, on the contrary, the outlook is not dark, but promising indeed.

Without attempting in this place the impossible task of a complete analysis, we desire to call attention to six points which differentiate modern industrial society from all its predecessors. These are: first, the practical exhaustion of free land; second, the predominance of industrial capital; third, the application of scientific methods; fourth, the existence of a competitive régime based on the newer conception of liberty; fifth, the spread

of education and the birth of a distinct public opinion; sixth, a true democratic spirit and the growth of a new idealism. What is the real import of these factors?

First, the virtual disappearance of free land. This makes slavery forever impossible in the future. Recent investigations have proved beyond the peradventure of a doubt that slavery as a typical economic system is ascribable to the existence of vast quantities of untilled tracts suitable for agriculture. Where any one can procure fresh land for nothing, he will not readily work for another; and when the soil is so exuberantly fertile that it can endure the wastefulness of slave cultivation, compulsory and not voluntary labour will be the dominant characteristic of the production. Slavery did not become important in Greece until the colonies yielded vast stretches of virgin land; the veoman farmer in Rome did not disappear until the world conquests of the later republic threw into the market such prodigious supplies of new territory as to make slave labour on the large estates lucrative. It was precisely the same cause that produced slavery in the West Indies and on the American continent. Those days, however, have gone, never to return. Fresh supplies of that kind of land are with insignificant exceptions no longer procurable. The older countries are quite filled up, and in the newer sections conditions are unfavourable. Australia and Siberia the climate is inimical to slavery. In South America the pampas are the home of a grazing rather than of an agricultural community, and it is well known that the flock tending and herding life is not conducive to slavery on a large scale; on the other hand, the agricultural regions of South America have realized that slave production is inadequate to meet the competition of free labour in the world market where their products are sold. It is only in certain districts of Africa and in the tropical islands of Asia that the conditions are still favourable to slavery. Were they to form so controlling a part of the empire as in former days in the colonies of Greece and Rome, the present struggle in England, Holland, Germany, and the United States to solve the labour problem in the dependencies without recourse to compulsion would be far less likely of accomplishment. It is because the entirely different economic systems and consequent social ethics of the mother countries are now the potent factors in the world that we may confidently look forward to the speedy passing of slavery in every part of the globe. Morality, indeed, is doing its noble work, but at bottom lies the disappearance of free land.

Secondly, the predominance of industrial capital. thinkers, from Phaleas of old to Henry George and Loria of recent times, ascribe all our social troubles to landed conditions. Others, like Demolins in France and Brooks Adams at home, tell us that the commercial route is the secret of prosperity and decadence. There is a certain degree of truth in each of these contentions as an explanation of the past. Both classes of thinkers, however, fail to recognize the essential changes brought about by modern industrialism. The conditions of land-holding undoubtedly played a dominant rôle in Rome, as they did in feudal Europe and colonial America. The control of the trade routes was assuredly the chief factor in the rise and fall of the oriental monarchies. of the Greek city states, of the Italian and German towns, of Portugal and Spain. But why is this? Clearly because of the absence of industrial capital. In the one case the economic system was based on the ascendancy of land as a factor in production; in the other case on the equal or even superior force of commercial capital. In the strict scientific sense, capital has indeed existed from the time of the first hunter's bow and arrow. But for practical purposes and for real aid in solving actual problems, the common man is perfectly justified in calling this the capitalistic age, just as Karl Marx was entirely correct in employing the word "capital" to describe the essential modern phenomenon. The economist calls attention to the fact that capital in the generic sense may be put into land, into trade, or into industry; but to the interpreter of social forces the typical form of capital to-day is industrial capital, as in feudal times it was landed capital, and as in so many civilizations of old it was trade capital. We have only lately been reminded that classic Greece, for instance, had its beginnings, its middle ages, and its modern times. But in ancient Greece, even at the height of its power, slave labour was the chief factor in production, and industry was predominantly of the small, non-capitalistic type. Again, the mediæval guild system of industry was in almost every

respect a contrast to our modern régime. The land problem is no doubt still important in a country like ours where seventy per cent of the exports are agricultural; the commercial problem is still significant in a country like ours which is seeking to secure its share in the trade of the newly opened Orient. But were we to read the signs aright, we should realize that in our case, as in that of all our great competitors, the secret of ultimate success is to be sought, not in the land question, not in our trade relations, but in the fundamental conditions of industrial enterprise at Industrial capital as distinct from agricultural or commercial capital is a product of modern times; it has never before existed as the tone-giving element of society; it is destined to produce very different consequences. Agricultural capital and commercial capital have been responsible for the landed and trading aristocracies of the past; industrial capital correctly analyzed and rightly controlled means not industrial aristocracy. but industrial democracy.

Thirdly, and intimately connected with what has just been said, is the modern application of scientific methods to industry. We speak glibly of the recent progress of science, but few realize the true import of this growing subjection of nature to man, and the revolutionary character of this harnessing of the powers of the universe to the voke of the human intellect. thing it has made possible an almost limitless increase in production. Landed capital, under the non-scientific methods of the past, was able to go so far and no farther. Even when extensive methods of agriculture were replaced by the intensive systems, the operation of the law of diminishing returns soon made itself felt, and marked a limit beyond which advance was impossible. The advent of commercial capital indeed increased prosperity and, to the extent that exchange is really a phase of production, augmented the productive power of the world. But here again its efficiency was limited within narrow bounds. Creating new values simply by the bartering of existing values, the pyramid of wealth rested on the basis of the actual production within each community, and could not be piled up beyond a certain height. But with modern industrial capital and the snatching from nature of her intimate secrets, the utilization of natural resources within each country has become almost boundless, and provides an ever broadening base for the benefits of trade and commerce.

It is for this reason that the history of the world in the future is to be so different from the past. In former times, after a certain point had been reached in agriculture and commerce. human ingenuity was powerless to do more than divide existing wealth; and with this fixed limit to production, it is no wonder that each civilization in turn should have attempted to secure the prize for itself. Hence the rise, the glory and the decline of nations. In future, however, in lieu of dividing existing wealth, each nation which lives up to its opportunities will be able to create new wealth. For we must not forget that science is not only boundless in its possibilities, but impartial in its activities. Science transcends all national lines. Never again will a country be able to achieve or to retain a monopoly of industrial advantages. For the time being, indeed, climatic conditions or racial characteristics may give one nation a temporary preponderance in some particular category of production; but with the overwhelming importance of new industrial methods applicable to all natural forces, the advantage cannot be permanently retained.

We are accustomed to speak of the economic and social changes brought about by the alteration in the media of transportation and the growth of the world market; we do not yet realize the full implication of the industrial revolution. Rightly conceived it means the coming internationalism of mighty empires, in friendly competition with each other, not for the division of what exists, but for the utilization of what can be made to exist. For the immediate future, indeed, while nations are still in unequally developed stages of industrial growth and while there remains extended markets not vet on the highroad to industrial predominance, there will still be some room for the nationalism of the old type with its protective features and its commercial struggles. In these contests we must undoubtedly take our part. But with every decade's progress in science the conditions will change, and the old nationalism of exclusiveness will melt into the new cosmopolitanism based upon the continual progress of each great and economically homogeneous community.

The fourth characteristic of the modern age is the development of the competitive régime. This needs but little more than a mention. Several of the former presidents of this Association have made us familiar with the real meaning of competition. They have pointed out that a competition of the right kind is a necessity to social progress—that progress consists not in doing away with competition but in raising it to a higher plane; not in suppressing it, but in preserving and extending it, while substituting a loyal for a disloyal rivalry. What often seems to be the crushing of competition is in reality the replacing of a lower by a higher form. The trade-union movement, for instance, with the progress from individual to collective bargaining, seems from one point of view to lessen competition; but no one who understands the real philosophy of the movement can doubt for a moment that on the whole it makes for a truer and more perfect competition based on the equality of the contending forces. The trust seems to be the very negation of competition; and yet if the conditions of loyal and healthy enterprise are insisted upon, and the trust be not permitted to take advantage of a legal code lagging behind the economic development, the net results of the movement may well prove to be the sloughing off of the evils of a lower competition and the attainment of a higher form of emulation.

It is precisely here that the force of the fifth factor becomes apparent, the emergence of a true public opinion to bolster up this demand for the retention and strengthening of the right kind of competition. In antiquity political and social opinion was a class opinion. In the middle ages the incoherent public opinion was intolerant to competition. In modern times the progress of economic thought and the pressure of economic fact in uplifting the hitherto submerged classes of the community are generating a public opinion which frankly recognizes the benefits of a healthy competition, but which insists more and more on effective social control of competition to the end that it be elevated and purified.

This is the true meaning of the sixth point of difference,—the flower and the fruit of all its forerunners,—the existence of the democratic ideal. We point, indeed, with complacency to the advance made by the working classes; but to those who realize

the essential conditions of successful democracy, where the mass of citizens are necessarily the labourers, the ideal to be attained advances still more quickly than the actual progress. brutish, lethargic peasant of the old world is content with his crust and his misery. The free citizen of our industrial democracy wants, and wants justly, to participate in the spiritual as well as the material benefits of modern civilization. With every advance in his economic position, due to the interplay of modern industrial forces, new vistas of possibilities disclose themselves, new sources of legitimate satisfaction make their appearance. The social unrest of to-day, with all its disquieting and deplorable incidents, is on the whole a salutary symptom. It is but the labour-pains in the birth of the new industrial order which has been in the making for the past few generations, and of which the faint outlines are even now discernible.

A study of the economic forces now at work thus justifies a reasonable hopefulness. The productive powers of society are augmenting at such a prodigious rate that we need no longer apprehend a decay of general prosperity or of natural power. There is to be no further irruption of the barbarian, because there will soon be no more barbarians. There is to be no swinging back of the pendulum of civilization, because under the influence of the new economic forces only those nations can succeed that understand how to utilize industrial capital, and this comprehension implies an ever ascending stage of civilization. There is to be no domination of each nation in turn over all the others, because of the inter-nationality of science and the impartial territorial diffusion of industrial agencies. And within each nation, while the rich are getting richer, the poor are not getting poorer. The creation of a more equable, because a more perfect, competition through the development of the system of collective bargaining and the more adequate supervision of monopoly; the recognition on the part of the legislator that lasting prosperity depends not only on the conservation and free play of capital but on the gradual elevation of the labourer from a cheap man to a dear man; the coming social control of competition itself in the interests of a more enlightened and hence really freer rivalry.—all these will inevitably tend to secure to each class in the community its proper share in the national dividend.

This is not fatalism. This is not the preaching of "hands off." Far from it! Man is a product of history, but history is made by man. Modern economic forces indeed provide new opportunities for all. But whether the correct use be made of the opportunities depends on the wisdom, the energy, the capacity of each individual of each social class, of each community. The economic life is the basis of social progress, but the economic environment which conditions this life is fast becoming an artificially created environment. In the creation of this environment there is a continually growing sphere for the conscious activity of the social group. With the subordination of the individual to the social interest, to the advantage of individual and society alike, there is an ever enlarging field and ever more pressing need for the wise regulation which will ensure a more even, a more equable, and a more harmonious development.

Economic theory, therefore, has a progressively important rôle to play in the future. With the commanding significance of the economic life in its influence on social progress, economics, in pointing out exactly what is, will inevitably concern itself with what ought to be. If the economist is the real philosopher of social life, he will take a more notable part in future speculation and future legislation. The different social classes, by reason of their very being, see only the particular, not the general interests. The farmer understands the working of Wall Street and the factory hand comprehends the condition of the world market as little as the capitalist realizes the true ideals of the labourer. To let any one class act as spokesman for the other is pregnant with danger. The economist, if he is worthy of his calling, will proceed without fear or favour; he will be tabooed as a socialist by some, as a minion of capital by others, as a theorist by more; but if he preserves his clearness of vision, his openness of mind, his devotion to truth, and his sanity of judgment, the deference paid to his views, which is even now beginning to be apparent in this country, will become more and more pronounced. The influence of economic conditions on economic theory has been, let us hope, abundantly demonstrated; but the reciprocal influence of economic theory on actual conditions is

in danger of being overlooked. For as the science itself becomes more and more complete, it alone will be in a better position to apprehend and to explain the real content of existing conditions and the true method of making the actual conform to the ideal. Natural science necessarily moves within the framework of natural forces, but he who runs may read the lesson of the control of these same natural forces through modern scientific achievements. So in the same way economic science, which is to-day only in its infancy, and which of all disciplines is the most difficult and the most complicated, is indeed interlaced with, and founded upon, the actual conditions of the time; but, like natural science, the economics of the future will enable us to comprehend the living forces at work, and by comprehending will put us in a position to control them and to mould them to ever higher uses. Economics is therefore both the creature and the creator. It is the creature of the past; it is the creator of the future. Correctly conceived, adequately outlined, fearlessly developed, it is the prop of ethical upbuilding, it is the basis of social progress.

CHAPTER TEN.

SOCIAL ASPECTS OF ECONOMIC LAW.

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1. The Social Point of View.

In the address which I had the honour to deliver on this presidential platform last year, attention was directed to the relation between economics and social progress. The effort was made more particularly to estimate the weight to be attached to the influence of economic forces upon social life, and to the effect of economic doctrines on social speculation. This year we shall, with your leave, look at the reverse of the shield, and endeavour to study some of the social aspects of economic facts and theories. In lieu of centering our gaze upon the narrow, although stable, economic foundation of social thought and social institutions, let us direct our view to the broad, but deep, social basis of economic principle and economic fact. Last year we studied some of the economic aspects of social law; this year we shall study some of the social aspects of economic law.

Such a course seems to require some justification. Why weary us with an old story, it will be said? Why reiterate a thrice told tale? Do we not know that the economic life is a part of the wider social life? Are we not fully aware of the fact that economics is a social science, and that every economic theory is in large part social in character? Do we not realize, quite adequately, the social imprint upon every economic fact?

In reply to such objections, I have to answer this: We grasp the form, but not the substance. We think that we appreciate the social basis of economic law, but in reality our appreciation is fragmentary. We do the theory lip-service, but not brainhomage. We are oblivious of its real significance. Because of this, in some of the basic questions of economic theory there are discord and confusion, where there should be harmony. Because of this, in some of the most important questions of applied economics, we are floundering about, tossed on the stormy sea of doubt without rudder or compass. Because of this, some of the current and seemingly fundamental doctrines of public finance are in reality erroneous, or at least impotent to explain modern tendencies or to afford any satisfactory clue to the solution of modern difficulties. By their fruits shall ye know them!

This is a severe and comprehensive indictment. You will accordingly expect me to substantiate these charges, at least so far as it is possible to do so within the limits of a single address.

The contrast between the social and the individual point of view has recently been made familiar to us in allied domains. Take, for instance, the whole range of ethical inquiry. Without entering at all upon the deeper problems of transcendental origins and supramundane sanctions, and limiting ourselves to a consideration of human development, it is now substantially conceded, or at least coming more and more to be recognized, that private ethics is an outgrowth of social ethics, that the morality of the individual has been fashioned by the morality of the social group, and that the very conception of right and wrong, so far as it is of human origin at all, is the product of social, not of individual, forces. The weakness of the early utilitarian theory is to be sought not in the fact that it propounded a hedonistic explanation of morality, but in that it placed itself upon the narrow ground of individual utility, rather than upon the broad foundation of social utility.

Our concern, however, is with economic, rather than with ethical, forces; and in the economic field we have ample and palpable proof of the shortcomings of the individual point of view, in history and in theory alike.

Take, for instance, Adam Smith's account of the essential principle of economic progress. You remember that Adam Smith finds the explanation in the division of labour, and thinks that this is the result of a certain trait in human nature, "the propensity to truck, barter, and exchange one thing for another." This individual propensity is made by Adam Smith the cornerstone of his entire edifice of economics. Yet modern research in ethnology

has disclosed the undoubted fact that he is quite mistaken. Far from there having been a natural propensity in man to truck and barter, the original propensity was just the reverse. Exchange was at the outset, and for many long centuries, considered not natural, but unnatural; not normal, but abnormal; not economic, but uneconomic; not useful, but reprehensible.

An analysis of the very terms used by Adam Smith shows this clearly enough. To truck is etymologically to trick, to cheat; barter is another form of barrator, and although barratry persists to-day only as a particular kind of crime, its primary meaning was far broader. Exchange was therefore originally deemed a bad thing, a heinous offence, as involving a wrong to the other party.

But, furthermore, we now know with some degree of verisimilitude how barter arose, and how it slowly changed from a wasteful to an economic process. Recent investigation has disclosed to us the phenomenon of the silent trade, and has made it clear that the earliest forms of exchange were inter-tribal, and not intratribal. It was only after the early hordes or clans had worked out the system of joint and collective presents and counterpresents which form the basis of primitive group barter, that the individual members of the clan came to recognize the applicability of a similar system within the group. Private barter is the result of communal barter, individual trade is an outgrowth of social trade. The propensity to truck, far from being a natural and original inclination of the individual, as Adam Smith thought, is a direct product of social forces. It is not antecedent, but consequent.

What is true historically is true analytically. If economics is a science at all, it is a science of values—not of all values indeed, but of economic values. Yet some of the basic discussions of economic theory are still beclouded by the inability to distinguish the social character of value. The favorite study of Robinson Crusoe, who figures so prominently in the older treatises, is indeed still useful as affording an illustration of the psychology underlying all individual choices; but the attempt to apply these conclusions directly to modern economic problems is fraught with peril, because the economic life of to-day rests not on Robinson Crusoe conditions, but

on social conditions. We have elsewhere called attention to the fact that the contest still raging between the partisans of the cost theory and of the utility theory of value is at bottom based on a misconception, and it may not be altogether without point to devote some attention to the recalling of this rather technical point.

When we say, correctly enough, that value 1 is the expression of utility, we really mean that it is the expression of social marginal utility. While social utility indeed is made up of a combination of individual utilities—that is, while a thing cannot be useful to society unless it is useful to the individuals who compose the social group, the marginal utility that influences value in the mind of each particular individual is the reflection of the social marginal utility. Or to put it in another way, while it is of course only through the mind of the single individual that the comparison between wants and satisfactions is made, and that the concept of utility emerges, not only is the utility of an economic good to each individual affected by his recognition of its utility to other members of the group, but the marginal utility which is of significance in value depends upon the relative numbers of the group with the given intensity of wants. In this sense we can speak of a social marginal utility. Even though a pound of iron may at a given moment conceivably be of more direct use to a particular individual than a pound of diamonds, a pound of iron does not satisfy as many, or as urgent wants of individuals in the group, i.e., social wants as a pound of diamonds. Iron is, therefore, less valuable than diamonds because its social marginal utility is less. Value is a social, not an individual, concept. In the same way, when we say that value depends on cost, we refer really to social, not to individual, cost. The street sweeper may work harder than an opera singer, yet the value of his services will be less. It may cost me five days to make a table that the factory will turn out in five hours, yet my table will not sell for more. The marginal cost around which values gravitate is not individual cost, but social cost. The value of a commodity is due not to the labour of the individual who has made it, but to the social service which it is going to render, that

¹ "The Social Elements in Value," Quarterly Journal of Economics, vol. xv, 1901.

is, to the social sacrifice which it is going to save. When we say that individual cost of production fixes value, we really mean that it expresses the value that is fixed by social forces as a whole.

The failure to recognize the essential equivalence of marginal utility and marginal cost is due to the neglect of this social element. It is true indeed that in modern life there is no such equivalence for the individual considered as such; and this has led most thinkers astray. If a knife ordinarily exchanges for a book, to any one individual the pleasure may still be less than the sacrifice, and to his neighbour the sacrifice may be less than the pleasure. I may like a cow more than a horse, or I may be able to raise a particular horse for less than a particular cow; but that will not enable me to buy horses in the market for less than cows. The balance or equilibrium is not between the pain and the pleasure of the individual, but between the pain and the pleasure of the individuals collectively considered, that is the pain and pleasure of the group. Individual utility is indeed not equal to individual cost; but social marginal utility must everywhere be equivalent to social marginal cost. The idea that there is an inevitable opposition between the cost theory and the utility theory of value rests on the failure to discern its social basis.

Let us look at some of the consequences of this failure. The classical economists thought that they had hit upon an important truth in differentiating the theory of international trade from that of domestic trade. As finally developed by Cairnes. the theory of international trade rests on an acute analysis of reciprocal demand and reciprocal cost in the sense of comparative social sacrifice. But Cairnes, like Ricardo and Mill before him, did not see that the same analysis is applicable to all trade, that is to all value, because in internal, as well as in international, commerce the controlling considerations are social, and not individual in character. It must therefore not surprise us to find that only the other day the gifted Prime Minister of England issued a noteworthy pronunciamento on the tariff agitation, in which he employed as one of the fundamental premises of the argument for protection, or rather for retaliation precisely this unreal distinction between the theory of international and the theory of internal trade. When we reflect on the weight to be attached to this ministerial manifesto in the politics of a great nation, must we not recognize the important consequences of such an error in theory.

I do not wish to be understood as intimating that because one of the premises happens to be unfortunately chosen, the conclusion cannot be defended on other grounds. On the contrary, the relation between the individual and the social elements of economics has often been inadequately expounded by the free traders, no less than by the protectionists. Adam Smith himself seems to realize that the collective interests are paramount, when he seeks to unfold the principles of the Wealth of Nations; but he identifies the social with the individual interests when subject to the unimpeded action of natural law. Mercantilists of old based their demands for extreme protection on the mistaken theory of balance of trade-mistaken, because it confused the collective economy with the private economy-because it assumed that a country, like an individual, must have a surplus money income. But the Free Traders went to an opposite extreme when they identified the social with the individual interest and claimed that if only individual action be unfettered and if free scope be given to the principle of self-interest the results are bound to be beneficent for the group as well.

Another illustration of the tangle of thought into which we are plunged by the failure to realize the social implications of economic law is to be found in the theory of private property. We have been taught that our modern age is immeasurably superior to that of classic antiquity, and as a typical proof we are referred to the progress in the theory of property. The Roman doctrine of private property was that of occupation, and is no doubt to be explained in large measure by the facts in the development of Roman life. On the other hand, the theory as elaborated by the philosophers, and tacitly accepted by the people, of recent centuries is the labour theory. We pride ourselves on the advance that has been made. The Romans seized their property, so it is said; we earn our property: the one is a brutal doctrine; the other a moral doctrine.

¹ Economic Notes on Insular Free Trade. By the Rt. Hon. Arthur James Balfour. 1903. p. 5.

And yet, half uneasily, half regretfully, we are beginning to realize that things are not quite so simple; that the labour theory does not exactly fit into the facts of modern life. In truth, the labour theory, like the occupation theory, is deficient because it looks at the individual, instead of the social, element. for example our modern problem of irrigation. The English common law conception of private property—the property that reaches, as has been drastically said, from heaven to hell-is a product of a moist climate—of conditions where there is an abundance—nay, even a superabundance—of water, and where private interest could be safely depended upon to give the best results. But in the arid and semi-arid regions of our western empire, neither occupation nor labour is deemed to give an equitable title to the river or the adjacent riparian lands. The new code of private property which is springing up in the West is one in which the individual rights are clearly and forcibly held subservient to those of the community.

What is true of irrigable land in the West is true in varying degree of many forms of private property in the East. "May I not do as it listeth me with my own," is a cry far less frequently heard than of old. Private property as a concept will no doubt always remain with us; but the content of the concept is changing and has changed from the beginning of civilization. Property in slaves was at one time considered economically advantageous and morally defensible. Private ownership of the highways was not so long ago usual and justifiable. In the city of New York to-day the process of the extinction of private property in docks is fast going on. If, as Carlyle tells us, no one believes what his grandfather believed, we may almost say no man owns what his grandfather has owned. Moreover, not only do we no longer own the same things, but even where this is the case, we do not own them in precisely the same way. What phrases are more common to-day than the obligation of wealththe public trusteeship of property, and the like. How long will it be before we tread the same path that has been opened up in the fiscal domain, where voluntary contributions have become transmuted into compulsory payments, and where the moral duty is now converted into a legal obligation. With the advance of society the individual element in the justification and in the content of private property recedes, and the social element comes to the fore.

Another application of the same principle may be seen in the controversy that is agitating all parts of our country to-davthe labour question, with the problem of trade-unionism and the open shop. If there were time, it would be profitable to dwell upon this thought—that while there is indeed only too much truth in the contention that many of our unions are steering perilously close to the rocks of monopoly and extortion, the problem cannot be solved simply by emphasizing the right of the individual labourer. The right of the individual to work is indeed, as Turgot told us over a century ago, a sacred and imprescriptible right; but the conditions under which this right is to be exercised are by no means a matter of mere individual discretion and of social unconcern. We are beginning to see that the securest guarantee of liberty is the social sanction—that true and permanent freedom is at bottom an outgrowth of social forces, and that individual bargaining results in a mere empty husk of freedom. Liberty—to quote Carlyle again—is a divine thing; the liberty to die by starvation is not so divine. If this is true, then the real sacredness and imprescriptibility attach to that wise and collective action which will secure a higher and more effective liberty for the members of the group, and which, it goes without saying, must be so devised as not to close the door of opportunity to either the unfortunate or the peculiarly gifted. To magnify the individual at the expense of the social group is to close our eyes to the real forces that have elaborated modern liberty and modern democracy, not in the backwoods of a frontier community but in the busy marts of commerce and the complex home of industry.

2. Application to Public Finance.

But however tempting the pusuit of this line of inquiry would be, we must pass it by in order to reach what is in some respects a still more important illustration. This is to be found in the domain of public finance. Partly for this reason, and partly because the questions of public finance have, so far as I recollect, never been touched upon by any of my predecessors in their presidential addresses, I venture to deal with this part of the subject at greater length.

The point we have in mind is concerned with a fundamental problem in taxation. In the ordinary manuals we find the chief emphasis put on the principles of uniformity and universality of The study of distributive justice, in its economic foundations, has long been the storm center of scientific fiscal controversy. Whether with the older writers we advocate the doctrine that men should be called upon to discharge their obligations to government in accordance with the benefit they receive from it-or whether with the newer writers we accept the doctrine that taxes should be levied in proportion to the ability of the tax-payer-in both cases alike the starting point and the goal of the discussion is the individual. This of course does not mean that these doctrines equally rest upon what might be called the atomic doctrine of the state. On the contrary, it is a matter of common knowledge that while the benefit theorists accept that conception of government which has been described as "anarchy plus the policeman" the faculty theorists on the contrary count in their ranks the advocates of radical social reform and even most of the socialists themselves.

The point that it is desired to emphasize, however, is that both schools are individualistic in the sense that their conception of justice in taxation revolves about the burden resting on the original individual who pays the taxes, and disregards the subtler consequences of the economic law that governs the transaction. Just as the benefit theorists think only of the advantages accruing to the individual, so the faculty theorists are primarily concerned with the problem of equal sacrifice as between individuals, with the exemption of the individual minimum of subsistence, and with the scheme of graduated taxation as between individuals. They, like the others, have in mind first and foremost the individual.

Now, there are two remarkable facts connected with this modern development of fiscal theory. In the first place, every American investigator cannot but be struck with the discrepancy in our text books between the theories and the application of the theories. My distinguished predecessor in this presidential chair, Professor Henry C. Adams, will I trust not think that any

betrayal of confidence is involved when I recall his statement that the great difficulty with which he had to contend, when writing his admirable work on the Science of Finance, was the well-nigh insuperable task of making his conclusions, drawn from the theory of ability, of any practical avail when dealing with our specific problems. And if we could analyze the thought of many members of this audience, I am confident that my distinguished predecessor is not by any means the only one who has been forcibly struck by this fact. The theoretical conclusions all seem to point one way, and the possibility of practical application the other. In fact, if I may be pardoned for sounding a personal note, it was this yawning gulf, this gaping hiatus between theory and application which prevented me from publishing several years ago the results of a protracted study on the Income Tax. I did not then understand that the difficulty is far more deep-rooted and that the disparity is due not to any doctrine of faculty, but to the underlying individual basis of the accepted theory of finance.

Not only are the conclusions of the generally received doctrine in part at least inapplicable to our conditions, but-and here we come to the second remarkable fact—the recent history of American taxation seems to be in flat contradiction to the very foundations of the theory. Equality and universality of taxation are accepted as the cornerstones of the faculty theory. How then shall we explain the fact that our general property tax is disappearing, that personalty is slipping out of the assessment lists and that in all our great industrial centers at least, real estate has come to bear well-nigh the exclusive burden. Where are the equality and the universality of that practice? shall we explain the fact that while indirect taxation is theoretically opposed to the doctrine of equality, in the country as a whole the revenue from indirect taxation is a continually increasing proportion of the total income. And if it is claimed that at all events our modern taxation of corporations is a step in the direction of greater equality, do you not see that the real tax-payers are not these fictitious entities which are called corporations, but the human beings that compose them? Taxation of the corporation is not taxation of the individual security holder, for the majority of the securities in great classes of our

corporations are in the hands of the bondholders who are not touched by the tax; since in every solvent corporation the payment of the stipulated interest is deemed a fixed charge, taking precedence of the payment of taxes. Wherever we turn the facts seem to give the lie to the doctrine of ability.

What is the explanation of this curious state of affairs? Are we really going to the bad? Have we lost our grip on the cardinal principles of justice? Or is the fault to be ascribed to the theory rather than to the facts. And if so, where shall we look for its weakness, and what is the new doctrine that is capable of interpreting the facts, and of clearing up the mist in which the whole subject is enshrouded.

To these queries I would answer: our American development is based not on injustice, but on justice; it is moving in the right, not in the wrong direction; it is in accord with, not in opposition to, the real economic law. If the current theory does not harmonize with the facts, so much the worse for the theory. In truth we have been living in a fool's paradise. We have accepted from the European writers, and have developed with wearisome iteration, a doctrine which is not only in flat contradiction to our American phenomena, but which if they were carefully analyzed, would be seen to be in almost equal opposition to the facts of European life. We base our theory of taxation on an explanation which does not explain. It is high time that we should emancipate ourselves from this foolish fetichism.

A few writers have indeed felt that there was something wrong, but have been unable to locate the real point of weakness. McCulloch, for instance, several decades ago, confessed that according to the accepted theory the income tax is ideal; but with the sound common sense of an Englishman he sturdily maintained that in practice the income tax is a fraud, and he contended that indirect taxes were therefore indispensable. Hence his conclusion that equality of taxation cannot be attained, and that what is right must give way to what is expedient and practicable—truly a lamentable conclusion. More recently Mr. Edwin Cannan stated that "economy plays and should play a much greater part, and equity a much smaller part, in schemes of taxation than is commonly supposed." If this were true we might as well abandon the notion that at

bottom there is an essential correlation between economic and moral law, we might as well relinquish the belief, so deeply cherished by some of us, that in the long run the true economic welfare of a community is identical with its abiding ethical interests.

But it is not true, and the failure to detect the truth, the inability to perceive the real cause of the clash between the theory and the practice is ascribable to the fact that we have put the emphasis upon the individual, rather than upon the social, aspect of economic law. Let me make my meaning clear.

When we speak of the burdens of taxation, we ordinarily think of the individual—of the burden upon one man as compared with that upon his neighbour. For in last resort it is always the individual who pays, either by dipping his hand into his own pocket, or by suffering a diminution in the revenue which he would enjoy if there were no tax. On this assumption we proceed to elaborate our highly wrought theories of fiscal equity. Thus we say that taxes should be proportional or progressive, that equality means relative equality as between individuals in the community, and that the real sacrifice imposed upon one man should not differ from that imposed upon his neighbor.

It is indeed true that writers on finance have been cognizant of the fact that not all taxes are borne by those that pay them in first instance. A chapter or two on the shifting and incidence of taxation is to be found in almost every treatise. But for the most part the distinction has been between direct and indirect taxes; and in the case of the indirect taxes, which are shifted to the final consumer, it has usually been thought that there is no room for any application of the doctrine of ability and sacrifice. To this is to be ascribed, in part at least, the effort of modern fiscal reformers to diminish the scope of indirect taxes.

But here we have a remarkable situation. It is conceded that when we tax the individual owner of a commodity which is subsequently disposed of by purchase and sale we must regard the economic law governing the transaction and study the consequences which affect other individuals, *i.e.*, the social results. If, however, the owner of the article does not dispose of it directly, but uses it to secure a revenue with which he then parts, we call it by some hocus-pocus a tax on property, not a tax on

commodities; and we shut our eyes to the essentially identical process of economic law. If we sell the sheep in the market, the tax, so it is said, is indirect; if we keep the sheep on the farm, and sell only the wool, we term it a direct or property tax. If a real estate broker deals in land, the tax on the land as it goes through his hands is an indirect tax, and presumably outside of the realm of ability; if he purchases the land, and sells the wheat, the tax is a direct tax, and to be judged by the principle of sacrifice.

This is far more than a mere question of nomenclature. In the one case we follow the working out of economic law through alterations in values; in the other case we assume that there are no such changes. In the one case we regard the social elements in the problem; in the other, we keep our eyes fixed on the individual element. Yet in essence what is the difference? What is the magic which transmutes a commodity into something different from a piece of property. A commodity is an economic concept; property is a legal concept: at bottom a particular article is nothing but a form of wealth, and subject to the laws that govern wealth. Yet the core of economic law is the study of the social relations of individuals. The entire distinction between direct and indirect taxes in the sense that in the one case we have to deal with immediate results, and in the other with ulterior consequences—this entire distinction is illusorv. In the one case as in the other the conspicuous fact is the social process.

It must indeed not be forgotten that some writers have in part apprehended this, and have endeavored to elaborate a universal law of fiscal causation. Adam Smith and Ricardo were on the right track but their efforts were largely frustrated by the fact that they centered their attention upon the shares in distribution; whereas in actual life we cannot reduce our bewildering variety of imposts to the simple categories of taxes on wages, rent and profits. Canard and his slender band of followers went a step further in boldly proclaiming the law of the general diffusion of taxes. But their exposition failed to command assent because they overshot the mark and overlooked the obvious cases where there is no shifting at all. As a consequence, modern theory has proceeded on the assumption that direct taxes at least tend to stay where they are put, and that the ideals of dis-

tributive justice are to be attained by an equitable apportionment of such direct charges on the individuals.

It is high time that we realize the fallacy underlying this assumption. As a matter of fact our complex modern industrial society has rendered necessary a transition from the individual to the social point of view, and calls for a study of taxation based on the existence of economic law. In such a study the two chief factors must be the shifting and the capitalization of taxation. Each of these has been more or less touched upon by previous thinkers, but no effort has yet been made to bring them into harmonious coöperation.

Capitalization is now a familiar conception. If a tax of one per cent is imposed on a corporate five per cent bond, previously selling at par, then if the bonds of other classes of corporations are not taxed the man who buys this bond will pay only \$80 for it; he gets \$5 interest and pays \$1 in taxes, and his net return of \$4 bears the same proportion to \$80 that the former net return of \$5 bore to \$100. In other words, the tax is capitalized into the difference of the market value of the bond, and the new purchaser who advances the money does not bear the tax. As the original holders gradually sell out, the tax in time comes to rest on no individual at all.

The shifting of a tax is not much more complicated, as a conception at least. If a special levy, for instance, is imposed upon houses and reduces the income of the owner, there will in ordinary circumstances be a cessation in house building until with the progress of population rents rise. But if rents rise, the manufacturer or merchant who occupies the structure will be compelled to charge more for his wares; and if these wares are the raw materials for some other product, the rise will be successively transferred from one operation to another until it loses itself in the prices paid by the ultimate consumer.

Let us now combine these two conceptions. The older doctrine of shifting led to the so-called diffusion theory; the newer doctrine of capitalization leads to what I would call the absorption theory. For in such cases the tax is not diffused, but absorbed. Whether, however, the tax is diffused or absorbed, the burden on the individual who comes to be the permanent owner of property ultimately vanishes. The combination of the dif-

fusion and of the absorption theories of taxation results in what I should like to call the final disappearance theory. That is, in all cases where a man parts with his property or with the produce of his property or his earnings—and in modern economic life this is more and more overwhelmingly the rule,—the tax finally disappears as a permanent burden on the individual on whom it is sought to be imposed; although, of course, it does not disappear in its effects, often unlooked for, on the economic progress of society as a whole, or of the various social classes in particular.

If we apply this doctrine to our problem, we are confronted by the following situation. Take a tax on land, for instance. In the case of agricultural land, provided that in practice real estate is the wellnigh exclusive, or at least the preponderant form, of property assessed, the tax is either shifted by being added to the price of the product or, where conditions do not allow this, it is capitalized into a lower selling value of the land, and when the land changes hands the new purchaser buys himself free of tax. Thus in the course of time the tax is diffused through capitalization or shifting. In city real estate the same is true; rents will go up, or the price of lots will go down, and in the end the community as a whole bears the burden.

Again, take personal property. In the case of mortgages it is now fairly well understood that a tax on the man who lends the money does not remain on him, but leads to an increase in the rate of interest, with all kinds of ulterior effects on building operations, and on the general fiscal and economic welfare of society. With personal property invested in corporate securities, the same results arise not only from shifting, but also from capitalization. In the case of the railway bond, mentioned above, the new purchaser does not suffer, but neither does the shipper, provided any dividends at all are earned. But in the case of railway stocks, the depression of market price that would follow the imposition of the tax might result in limiting the investment of new capital to such an extent as to diminish facilities or to raise rates. In the one case we would have capitalization, in the other, shifting. But in neither case would there be any permanent burden on the individual security-holder who purchases after the imposition of the tax.

The same analysis might be applied to other forms of taxation. To keep our eyes riveted on the individual taxpayer will sometimes fail to disclose the true situation.

A new light is thus thrown on the distinction between personal taxes and what are called real taxes but which we prefer to call impersonal taxes. The books tell us that personal taxes are not infrequently inquisitorial. This is undoubtedly true. But tax reformers nevertheless advocate personal taxes, because they think that in this way alone can individual justice be secured. They fail to realize that under modern economic conditions the only kind of a personal tax which can always be made to rest on the individual is a poll tax, or a direct consumption tax, both of which all agree in condemning. Under the highly complex competitive conditions of to-day, the general property tax becomes in practice a partial property tax, or a tax on certain kinds of property, irrespective of the question of individual ownership. Under modern conditions even an income tax which is presumed to reach with accuracy the ability of each individual often becomes in practice either what the Germans call a Lüg-und-Trug System, a "lie-and-cheat system," with the burden primarily on the classes less able to pay; or, as in not a few countries, a series of imposts on the property which yields the income, or on the corporation or the employer who pays the income. In neither case is there any assurance of equivalence between the amount of the tax and the ability of the recipient of the income.

If we recollect that in the ultimate working out of economic law there is no such distinction between personal and impersonal taxes, but that the difference is largely one of administration, our attitude to the whole problem is changed and our opinion as to the undoubted superiority of personal to impersonal taxes must be modified. The origin of our present confusion is not far to seek. In the middle ages there was no active competitive life. Land was not commonly bought or sold, corporate securities scarcely existed, and there was wellnigh no field for capitalization of taxation. Exemptions were granted to individuals and to classes—not to classes of property, but to classes of individuals owning property, which is a very different thing. Taxes on consumption were so contrived as to fall with crushing severity on the in-

dustrious and the worthy. What wonder that the cry went up for justice through individual equality of taxation. And even to-day, in parts of this country where more primitive economic conditions still prevail, there is perhaps some saving virtue in a general property tax, considered as a personal obligation of the individual property owner. The simpler a community. the weaker are the action and interaction of social economic forces: the more scope is there for the emphasis on the individual factor. But in the more complex society of to-day, the society of competitive capitalism, of mobility of economic agents, of large industry and of the modern media of communication and transportation, the problem is no longer that of the individual, but of the effect of economic law on the various classes of society, on the agencies of production and on the facts of group, rather than individual, consumption. What we have called the disappearance theory of taxation rests on the facts of social production and of group consumption.

The conclusions can be put succinctly as follows: Under conditions as they already exist in a large part of this country, and as they are fast coming to exist in the remainder, the effort to secure justice in taxation does not imply the need of considering only the individual. It is not necessary to impose a tax on the entire property of the individual; for a satisfactory result can be reached by taxing only special classes of property, provided of course that we do not repeat the mediæval error of exempting particular individual owners within each class. It is not requisite to tax all corporations, or all corporations alike since it suffices to tax only certain classes of corporations. Above all, while we do not need to tax all consumable commodities, as by the general excises of former days, it is equally unnecessary to apply the predicate "just" to direct taxes, and to withhold it from indirect taxes.

But we must not be misunderstood. In our impatience with the old doctrine, we must be careful not to jump too far to the other extreme. While it is true that property taxes which are not shifted tend, according to the absorption theory, to be capitalized, thus exempting the future owner, the burden still remains on the present owner. That is the very meaning of absorption, as opposed to diffusion. Final disappearance does not

mean immediate disappearance, and in many cases the immediate results are the important ones for the individual. It is manifestly unfair to make the present bear all the load of the future.

Hence it behooves us to go slowly. We must hesitate before levying high special taxes on particular kinds of business for fear of injuring the business itself, and thus sacrificing both future and present. We must pause before accepting the scheme of our single-tax friends, because their basis is too narrow, and the sacrifices demanded from the present owners of land are too heavy. Per contra, we need not accept the old project, now again furbished up and presented by some, that the ideal impost is a tax on all forms of productive capital,—for quite irrespective of its magnificent impracticability, the theory of capitalization renders it quite unnecessary.

Our American system is therefore moving in the right direction. We do not levy our so-called indirect taxes indiscriminately as of old; but apart from the tariff, the importance of which is only secondarily fiscal, we limit the subjects of federal taxation to a very few articles of widespread consumption. We no longer in our most advanced states attempt in practice to levy a general property tax, but are content, as is almost true in New York to-day, with state taxes levied not on individuals, but on inheritances and corporations. Finally, while in local taxation we still hold to the theory of a general property tax, in practice we are fast coming to the wellnigh exclusive taxation of real estate.

But whereas we are moving in the right direction in these commonwealths where the conditions are ripe, simply because the economic facts are too strong for the law, the law still conforms to the old theory. And the difficulty of altering the law is ascribable to the fact that neither our statesmen nor our economists have yet been able to frame a theory which will at once explain the conditions and respond to the sense of justice in the popular mind. Let us hope that when once we shall have realized the true implications of this newer theory which emphasizes the social aspects of economic law, we shall be able to prove to the satisfaction of all that in order to secure justice we do not need to impose a tax which seeks equally to hit in

first instance every individual member of the community. We shall then grasp the fact that while equality from the individual point of view means equality as abstracted from class differentiation, equality from the social point of view means equality within the class, and is compatible with an ostensible inequality between the classes. For here as elsewhere, all is not what it doth seem, and the apparent original inequality, when subjected to the crucible of social analysis and social process, resolves itself into a higher equality.

3. Conclusion.

In conclusion, then, let us not minimize the revolutionary character of the general principle which is the burden of our theme. We submit it indeed with diffidence, but with a firm conviction that, if true, it is destined to lead to important results. If the social aspect of economic law is really as significant as we think it is, we must rebuild large parts of our economic edifice. We must recognize that the psychological school of economics has gone off on a wrong track, not because they emphasize psychology, but because their psychology is not of the right kind; we shall have to confess that the opposition between the cost theorists and the utility theorists, is to a great extent needless; we shall have to revise our attitude to the problems of international trade, of private property, of the relations of labor and capital; and above all, we shall be compelled to rewrite our works on taxation and finance.

Let me trust, however, that there will be no misconception of the real bearing of my contention. The subordination of the individual to the social element in economic life and law does not imply any depreciation of the individual as such, nor does it mean that the ideal polity of the future must resemble the crude socialism that is so loudly proclaimed by some. For all human beings, after all, the goal of endeavour must be the perfection and the fruition of those latent qualities and possibilities that distinguish us from the brutes and that constitute our personality. Moral development means self-development, and progress can come only through freedom. Individualism in this sense is the very goal of all achievement.

We must, however, not forget that the individual has become what he is largely through society. Let us remember that side by side with the individual struggle for existence, there has been the group struggle and that, as has recently been pointed out, the mutual aid within the group has been the very condition of the contest between the groups. Let us remember that the individual as he exists to-day has been hammered out by society, that individual ethics is the result of social ethics, and that individual progress is largely the consequence of social progress.

Economics, politics and ethics are each of them a part of the greater social science. In each of them we find the universal problem of attaining unity in multiplicity. The aim of economics is to show the reconciliation of private wealth with public welfare: the object of politics is to secure individual liberty through a free commonwealth; the goal of ethics is to prove that individual morality is in harmony with the very conception of the universe. Economics shows how a prosperous individual can come only through a prosperous society; politics teaches how a free individual can persist only in a free society; and ethics makes it clear how a perfect individual can be conceived only as a constituent of a perfect society. Prosperity, freedom, moralityall alike are at bottom social conceptions. They can be reached in practice only through a common striving together; they can be comprehended in theory only through an analysis which accentuates the social element.

CHAPTER ELEVEN

THE ECONOMIC PROBLEMS OF THE MODERN DENTIST

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I shall endeavour in the address to-night to approach the problem not from the technical side, on which you are all past masters, but from the point of view of the relation between yourselves and the larger society which embraces all of you. situation is the same as that which has been presented in recent years, when we have been considering the world economic problem and the relation of this country to that wider problem. We are all enmeshed in the same net. We can no longer say, as did Washington and Jefferson, that we shall have nothing to do politically with the rest of the world. We were at that time economically separate and independent: to-day we are no longer independent. We are dependent upon the rest of the world both for many of the things that we need and for many of the things of which we desire to dispose; both as a source of supply of much raw material, and more especially as a market for our surplus products, agricultural as well as manufactured. We stand economically in the closest possible relation with the rest of the world, and that is why we Americans have been summoned to participate in the solution of the European problem, and why we all feel a sense of satisfaction in that the socalled Dawes report was prepared, in part at least, by our own fellow citizens.

What is true of the community is equally true of each member of the group. Each one of us, whether he be a dentist or anything else,—a professional man, a working man, a capitalist,—necessarily plays a part, however humble it may be, on the larger economic stage. He cannot avoid assuming a certain responsibility for the whole: he cannot help being influenced

by the actions of the whole. And if there is anything in this modern art of economics, which may be summed up as the effort to make wealth cheap and man dear, it behooves each one of us from time to time to stop and to reflect as to the rôle which we are playing on the larger stage and as to the reactions which come back to us from the whole.

It is from this point of view that I desire to discuss a few of the problems in which you, as everybody else, are naturally interested. There are three points. The first question is: how much of an income shall you have and how shall you get it? Secondly, presuming that you have settled that problem satisfactorily, the next question is: how shall you spend your income? What shall you do with it? At what point are certain expenditures desirable or legitimate; at what point do they cease to become either necessary or justifiable? The third point is: how much shall you save and, when you have saved, what shall you do with your savings; how shall you invest them. and what shall become of you as an incipient capitalist? These three points affect every one of us, in our endeavour to secure a living. That is what we sometimes see. What we do not always see so clearly is how it is that we fit into the great scheme. the national scheme, the international scheme, the cosmic scheme.

In approaching this question, it is evident that the subject bristles with all sorts of difficulties. Indeed, it cannot be maintained that in what I propose to set before you there is complete unanimity in economics. No doubt in dentistry also there are still unsolved problems, there are still points on which experts will differ. Nevertheless, with the passing of time we may notice in economics, as in dentistry, a continually greater agreement and a progress toward a more complete knowledge and appreciation of the truth.

1. Earnings

Let us then devote our attention to the first problem. What do you earn, and how much ought you to earn? What ought you to charge and how ought you to charge? These problems are not peculiar to yourselves. They are questions that confront

you in common with every other member of society. When you talk about your earnings, you are discussing what in the case of a workingman is called wages, or in the case of a professional man compensation. And there are definite explanations as to how those earnings and those wages are fixed.

There were in the past many theories, more or less unsatisfactory, to account for this; but it may be said that at the present time there is a double explanation which goes far to throw light upon the universal problem. The one is that wages, like interest, are a part of the cost of production and are influenced by productivity. This means that the amount which any one individual can secure depends largely upon the particular increment that he contributes to the social dividend. It implies, furthermore, that your returns are necessarily affected both by the cost of the preparation of your services, which is your cost of production in fitting yourselves for your career, and by the amount that you have to expend in conducting your occupation, for your rent, for your implements, for your books, etc.

It is here that an interesting fact confronts us, namely, that the cost of production of a dentist, like that of other professions, has risen enormously in the last few years. I remember the time, not so many years ago, when a dentist was looked upon rather askance socially, just as in earlier times in the Middle Ages a surgeon was regarded with considerable suspicion. It is well known that at first the surgeons were nothing but barbers or blood-letters; the very sign with red and white stripes which you sometimes see in a barber shop shows that that was their original occupation. One of the leading European guilds of the Middle Ages, in fact, was that of the barbersurgeons. It took a long time for the surgeons to win their way up in the social scale; and what took place with the surgeons happened with other classes and has more recently occurred with the dentists. The dentists have to-day attained the desired goal; but it has been a long and costly process. Instead of a year or a half year of preparation, you now have the full term of preparation, the many years, the expensive years. Accordingly, since that is the inevitable consequence of the elevation of the standard of the profession and of the change in the attitude of the public toward the profession, the result is that a dentist to-day must, in order to maintain his position, receive a far higher compensation, relatively speaking—not alone absolutely but relatively speaking—than was the case a decade or a generation ago.

There is another point which explains why you are all justified in demanding a larger return than formerly. It must be quite plain to you that in the economic life of the modern world where everything is measured in terms of money, it is no longer true, as we used to think, that money is a standard so fixed and so immutable that we can absolutely depend upon it. You all know that we have been passing through a period of rapidly changing prices. I do not refer to the situation in those unhappy countries like Austria or Germany, where money has practically been denuded of all value, and where the professional men, in order to eke out even a bare living, have had to descend to the most humble kinds of manual labour. I speak of countries like our own where the changes in the value of money have been very pronounced, with a result that a definite income no longer means. in the way of enjoyments and opportunities, what it denoted five or ten years ago.

You must consider, therefore, in calculating how much you ought to earn, not alone these changes in the cost of production, but also these alterations in the money standard. Assuming, however, that you have made allowance for this, the question next arises, how much ought you to make, how much ought you to try to earn? That brings us to the threshold of a very interesting problem which is now convulsing the world, namely, the real meaning of our present industrial or capitalist system, and the possible substitution for that system, in so far as it does not work well, of another system such as the socialist system, or the soviet system.

This is not the proper occasion for a comparison of capitalism with socialism, nor even for a discussion of the weaknesses or the shortcomings, as over against the advantages and the strength, of our present industrial system. But one point, which is of importance, needs to be emphasized. It is often claimed by the critics of our present system as a fundamental weakness of our existing economic life that the average business man, in his endeavour to make a living, looks primarily at the profits

which he can earn; whereas under a more ideal system we should be governed not by the conception of profits, but by the conception of service. I shall not attempt to estimate the justice of this claim further than to state that it has been considerably exaggerated. We are prone to think of a man like Ford who has amassed a vast fortune. But do we realize that his millions are being heaped up only because he is of such undoubtedly great service to the community as a whole. What needs to be emphasized is that so far as you, in the more learned professions, are concerned, you are, if true to yourselves, already in possession of that newer ideal. No dentist. no physician, can properly say that he has entered upon the occupation primarily for the sake of profits. He has a right, of course, to claim that he has taken up the profession in order to make a living. But he would be a sorry spectacle in medical or dental science to-day who would put to the forefront of all his activities simply the idea of making money, oblivious of the service that he renders. In this respect, therefore, you have every reason to be satisfied with the present economic system; because, even if you lived under another economic system, you would still have to do primarily what you are doing to-day, that is, you would have to seek to give the best service of which you are capable, even though, incidentally, because the labourer is worthy of his hire, you are receiving a compensation. From this point of view, therefore, you form an important part of the whole body economic because you and your medical brethren, perhaps more than any other class of modern society, are to be judged in light of the fact that you not alone receive, but also give, and that service plays a conspicuous rôle in the part you perform in life.

The final point under this first head is the other side of the question,—not so much what you get, but how you get it. How should you charge for these services which you so unstintingly give? The question is: shall you pursue the policy of fixed prices, or shall you adopt the principle of charging according to ability to pay,—a very different thing. I assume that none of you would be willing to accept the Chinese method; it would be a little difficult, perhaps, in the case of dentistry. In China, as you know,—or at all events that was the custom until

the introduction of modern methods—you paid your doctor by the year for keeping you well, and then for every day of illness you deducted a certain sum from that amount. It would probably be a little severe on the dentist to pursue that principle, and I do not think that it has ever been suggested as a proper method of compensation. But assuming that you receive a remuneration for the service which you render in restoring invalids to health, the problem is: shall you follow the method which is found in the shops on Fifth Avenue, namely that of a fixed price, one price to all; or shall you observe the principle which exists in some of the quarters of both our East side and our West side, and which is typified in the shops of Italy and some of the other European countries, and especially in the Oriental countries; shall you graduate your charges in accordance with what you think the traffic will bear?

Now, obviously, that principle, in its coarser forms, is open to very serious objection. None of you who have had the pleasure of attempting to buy carpets in Stamboul or lace in Cairo or precious beads in Naples, would, I fancy, welcome the necessity of this continual dickering with the proprietor. A man who even in China to-day would pay the sum that is first demanded by the shopkeeper would be set down as partly demented. On the other hand, you have the English principle, the American principle, the Anglo-Saxon principle, which is now spreading throughout the world, of fixed prices. When, however, you come to the situation which regards conditions not of ability to dicker and to truck, but of economic capacity to make sacrifices, we find that no less an important economic institution than the state itself follows the latter principle. When the government first levied a tax it did indeed follow the principle of fixed prices and charged everybody the same. We have survivals of that system in our poll tax. We do not pursue that method in this state but they practice it in many of the states, where everybody, rich or poor, pays his definitely fixed poll tax. Nowadays, however, when you prepare your income tax return you are not all charged the identical amount; but each of you pays in accordance, theoretically at least, with what you can afford to pay.

Accordingly it does not follow as a matter of necessity that

a high-minded dentist must pursue the policy of fixed prices. Our surgeons do not do it. They do so for the customary run of cases,—an ordinary visit costs so much, a simple treatment costs a definite fee. But when it comes to an important operation, a life-and-death operation, the surgeon will make a distinction: for many people he will charge nothing; for many he will charge very little; for a few he will charge, and in my opinion he is justified in charging, a great deal. This constitutes a problem which might profitably be made the subject of an evening's discussion, namely, the persons to whom, and the conditions under which, you would be justified in substituting for your flat fee of whatever amount, a charge for the more difficult operations which you are called upon to perform calculated according to the principle of ability to pay. I do not venture to assert that the one or the other method is definitely more economic. But I contend that according to the modern principles of remuneration the application of the principle of ability to pay is not necessarily ruled out.

There is one other point on which just a word is desirable, and that is whether in attempting to induce your patients to pay your charges, you ought to work all the time; whether, from the point of view, not necessarily of your own success, but of your responsibilities to your family, to those about you, and to the community as a whole, you are justified in working incessantly. Of course, it goes without saying that all play and no work will not be very successful; and conversely the old adage that "all work and no play makes Jack a dull boy," is no doubt also true: but what I want to bring before you is the economic value of hobbies. There exists in New York an organization called the Hobby Club. No one is eligible to membership unless he rides a well-defined hobby horse, whatever its character. The real importance of hobbies has frequently been overlooked. By a hobby I mean some avocation which will enhance your economic value to the community; something of a suitable and dignified character, to which you can turn in your leisure moments, and which will task either your mental or your physical energies; something which will as a consequence make you not alone a healthier, but what is far more important, a better man. a man calculated to give better service to the community. It

is well known for instance, that Gladstone's hobby was chopping trees. In like manner, former District Attorney Jerome had a hobby of working at iron and metal. Without developing this subject in all its ramifications I desire to emphasize the need of the introduction among you of more hobbies than we find among the average professional or business men to-day. A well selected hobby must not be neglected as an element in the modern problem of success.

2. Spendings

Let us assume then that with this hobby, or without it, you have succeeded in securing what you consider a fairly good income which is compatible with your endeavour to serve the community rather than to make profits. The next question is: what are you going to do with it? How are you going to spend your money? Here, obviously, we all are to be criticized. The flesh is weak; the richer a man is, the more luxurious he is apt to become, the more he is likely to spend upon himself., Perhaps the most common of all economic fallacies is the fallacy with which the rich man solaces himself, namely, that it is beneficial to the community for him to be luxurious, that it puts money in circulation, that it supports people who otherwise would be idle. that, in short, luxury is the one thing which saves society. This is a fallacy, a hoary fallacy, a fallacy almost as old as civilization itself. We find it mentioned in the Bible; we find it propounded by the thinkers in the olden times. It is only in recent years. however, that the real considerations have been brought out. The point can be made clear by one example. If it is really beneficial to spend money profusely in order to keep people employed, why wouldn't it be an admirable thing for us to walk down the avenue and to break all the windows of the houses as we pass by, because thereby we should give employment to the glaziers who would otherwise be unemployed? Are you really creating work by doing that? By a little reflection you will discover the fallacy. It is not that you are giving work to people who would otherwise be unemployed: because if you do not spend the money for those luxuries, either you will be spending it, or someone else will, for necessities or comforts; or you

will be saving it and putting it in the bank, which again will lend it to people who will spend it productively. Your luxurious expenditures do not give rise to one additional particle of employment in the community as a whole. They simply divert people from producing certain kinds of things to producing other kinds of things. At present under our Eighteenth Amendment they divert people to producing wine and whiskey in unexampled quantities!

The point that I am trying to emphasize, therefore, is that you have no right to salve your conscience by becoming luxurious and thinking that you are conferring a benefit upon the community. The good thing that you can do for the community is to see that those large masses who to-day are on the border line of starvation-who do not even have the necessities of life, not to speak of luxuries or comforts-that those great masses be put into a position where they can enjoy a little more of the comforts of civilization and thus contribute toward the development of our great democracy. Luxury, therefore, may be eliminated. No man, no matter how great his income, has a right to be luxurious. If there is any justification for luxury, economically or morally, it is a case for public luxury and not for private luxury. No man has an economic or a moral right to have a great picture gallery worth millions of dollars unless he proposes to hold it in trust for, or to bequeath it to, the public. The community alone has a right permanently to possess art galleries and great libraries.

Therefore, the problem arises with each one of you as a member of modern society: "Where must I stop in my profusion of expenditures." That brings up, of course, the question as to how much of a family you have. Here I am touching upon a rather delicate subject, but one which cannot be avoided. Those of us who have followed the modern science of eugenics are well aware of the fact how, with the growth of wealth and with the development of this hectic civilization of ours, families are beginning to decrease in size; so that nowadays a man with one child is the rule, with two or three children the exception, with eight or ten children a marvel, and with eighteen or twenty children, as used to be the case when I was a boy, almost fit for a lunatic asylum. Now, of course, the larger your

family, the more of your income you must spend. We are familiar with the excuses that we make to ourselves. We have small families either because we cannot afford, or think we cannot afford, to support more children, or because our wives shrink from the trouble or the pain of childbirth, or do not wish to undergo the drudgery of caring for large families, or for the thousand and one other reasons that seem good and sufficient to most of us.

But how many individuals, I wonder, ever think of their duties as a member of the body politic or the body economic. If there is anything in the modern science of eugenics it is that blood does tell. If there is such a thing as "blue blood," and if we have a right to look forward to a continual progress in our civilization, we must rely, to a greater extent than we have come to think of in recent years, upon a reproduction of those who are intellectually, physically and morally the best. Of course, I do not wish to carry the thought to the extreme. I know perfectly well that many of the best intellects and the most distinguished people have often come up from the bottom. But none the less, the history of science, of invention, of progress, tells us that there is such a thing as inherited qualities that count. From that point of view it might be profitable to devote some consideration to this question of how many children you ought to have, and how much income you ought to put aside for the support and the education and the upbringing of those children, rather than for the purchase of an automobile for yourself, or for membership in a golf club, or for luxurious expenditures of various kinds. The economic problem involved is an important one. We do not realize it because we do not think of it. If you lived in France you would be confronted by the problem daily. The paramount question in France to-day is the future size of the race. That is the basic reason for the antagonism between France and Germany. The fundamental fact is that, because of reasons which are entirely familiar to the student, the French have only one or two children and the Germans have. or at least until recently have had, five or six children apiece.

Finally, the last question under this head of what you can afford to spend, is: how much ought you to devote to charity? We could spend many hours on that problem. The slap-dash

solution that we find in the Old Testament is, as you will remember from the Jewish writers, and later from their Christian followers, that a tithe or a tenth of a man's income ought to be devoted to charity. In this formulation, the question first arises: what do you mean by charity? Perhaps you professional men, do in a certain way practice more charity than anybody else, in that you are all accustomed in certain cases to give your services gratuitously. But while that is true, it is not quite sure whether this should be called charity in either the economic or the ethical sense of the term. A man who gives of his abundance and gives freely may be liberal, but he is not necessarily charitable. A millionaire who will donate thousands or hundreds of thousands may be generous, but he is not necessarily charitable. On the other hand, the poor washer-woman who will deprive herself of something that she needs, in order to be helpful to a neighbour, is charitable. Charity implies self-sacrifice. How many of us are really charitable in that sense? Assuming, however, that we understand what we mean by charity, how much of our income ought we to devote to that?

A few years ago a wealthy merchant came to me with that He was a good man and was much troubled. He said: "I don't know how much I really ought to devote to charity, not from my own point of view but from the economic point of view." I replied: "Mr. Smith, I think that you have raised a very interesting problem; if you are anxious to have it investigated, send me a few thousand dollars, and I shall see that it is considered by the American Economic Association." It was so considered and with admirable results. A book was written by Professor Douglas and his wife, of the University of Chicago, on the subject of how much a man can afford to spend. showed that a certain definite part of the social dividend is necessary for the upkeep of the poor, for hospitals, for education, and for other similar purposes; and they figured out what that sum amounted to at the present time in this country. They finally decided that the amount which each man ought to be able to devote to charity should be arranged on a graduated scale, not according to a rule of thumb or just ten per cent of his income, but according to a progressive rate, very much as our super-tax is arranged. Accordingly, in proportion as your income increases, whether it be five or ten or twenty or fifty thousand dollars a year, you can ascertain without much trouble how much of a percentage of your income you ought properly to devote to charity in order to contribute your proportionate share to the economic life of the country. Without going into this subject at greater length, all that it is necessary to say now is that you ought probably to be giving a great deal more than is actually the case. Most of us fail to do in this respect what from the broad economic point of view ought to be done; and to the extent that we fail, the community itself must, of course, shoulder the burden; so that in the long run it comes out of us at all events, if not in voluntary contributions, then in taxes.

3. Savinas

Suppose then, that you have decided what you shall charge, and what you shall spend, the third problem is: how much will you save and what shall you do with it when you have saved it? The first point is, whether you ought to take out an insurance Modern life, with its oscillations, uncertainties and risks, with its business ups and downs, has brought into the forefront the necessity of insurance in a way that was never thought of before. We are now accustomed to fire insurance, to marine insurance, to property insurance; but the real implications of the necessity of life insurance in order thoroughly to safeguard the interests of those that we leave behind us have only begun to be understood. This is true despite the fact that in no country in the world has this practice developed to such an extent as in our own: we write, indeed, more policies to-day than all of the rest of the world put together. But still the average man is almost always remiss in this respect. If a man has a large fortune which has come down to him from his ancestors, or if he has been fortunate enough even as a professional man in his early years to amass a great sum, then, indeed, provided he has invested wisely, he is fairly safe. But the ordinary man who cannot depend upon accumulated wealth or upon investments owes it not alone to himself, but to the whole body economic, to safeguard himself, as far as he can, against these chances, these baleful occurrences which are apt to strike each one of us unexpectedly. A large part of what would otherwise be your savings ought freely to go into adequate insurance.

But suppose that a surplus remains, as ought to be the case: what are you going to do with it? When I say that there ought to be, what is meant is not from your point of view, not from the point of view of your own comfort, but from the broader point of view of the entire community.

Civilization is built up on capital and we can have no science and art except upon the basis of material wealth. There has never been a really great civilization without a rich civil-But in order to secure an accumulation of capital we must indulge in the painful process, so far as individuals are concerned, of saving. In modern times, of course, much saving, especially in a country like ours, is achieved through the ordinary business operations of our great corporations. None the less it remains true that it is every man's duty to make a certain contribution toward this social capital; and this means that no one, no matter how small his income, has either an economic or a moral right to spend the whole of his income, unless he possesses a capital from which this income is derived. income is derived, as I imagine, with most of us, from our own exertions, which may stop at any time. Consequently we need to insure and to save; and if we save, the question arises how are we going to invest?

Here again the problem is a simple one. It is a choice between cupidity and sanity. Will you take four per cent and sleep peacefully, or try to get eight per cent and worry? Will you invest in well-seasoned bonds and preferred shares, or will you take fliers in oil stocks or analogous "securities"? Another problem connected with this, but upon which it is possible only to touch, is as to how far you are justified in speculating. Here there is not a little misconception. Speculation has often received an unpleasant connotation. So far, indeed, as it is simply a matter of chance, it is no better than playing a game of poker. But if you look at the moneys that are earned in Wall Street—I won't say by the professional speculator, but by the expert financiers—you will find that ninety-nine times out of a hundred what is called speculation is simply intelligent study and

careful investment based thereon. It is by no means precluded that a professional man, if he has the energy and the health and the time, should be able to give a little attention, perhaps half a day a week, to such investigation. I am thinking of a friend, an exceedingly able young professor now deceased. who resolved that he would devote such a period to the study of the problem. He went down to Wall Street and, taking a desk in a friend's office, made an intelligent study of certain financial and industrial enterprises, with the result that he acted accordingly, and earned a large sum of money. But when he amassed a certain amount, he stopped, because he wanted to do other things than simply to become wealthy. You must not infer from this that I am advising any of you to take tips or to indulge in fliers in Wall Street. There is only one end to that; and that is disaster. For one man that succeeds, a thousand fail, and fail dismally. But if you have the intelligence or the energy or the time, and are willing to devote them to a careful study of some particular security or financial enterprise there is no reason why you should not make that your hobby, rather than one of the other things that have been mentioned.

But after all, the larger part of what you would otherwise save goes nowadays to the government in the shape of taxation. If time permitted it would be well to dwell upon this point and to call your attention to the necessity of your taking an intelligent interest in the problem of adequate, just and equitable taxation. There is no use in railing at our so-called politicians. For in a democracy like ours it is public opinion that always triumphs. The reason why conditions are so far from satisfactory is that most of us are too lazy or too selfish to give sufficient time to a study of the problem, and to an insistence with our representatives to act as we think they ought to do.

That brings me to the closing point. After you have earned your money, and after you have learned how to spend it and to save it and to invest it, you will have to ask yourselves: what is it all for; what, really, is the whole thing about; what is it worth? That brings up the profound philosophical problem of the world order and of our own happiness. What do we mean by happiness? Some of us are happy when we buy a new piano. Some of us are happy when we bask in the sun. What is it

really that we are after? Ought we to try simply to be happy, with a probable chance nine times out of ten of failing to secure the happiness; or ought we rather to regard happiness as a by-product, just as you should look upon your income as a by-product of your service. Happiness in life is after all not something that you can seek: it is something that comes without your seeking. If you give expression to your own individuality; if you accomplish things that are worth while; if you live for others and not for yourself: then happiness will come. But if you say to yourself: "I intend to be happy: I insist on being happy," the chances are that you will be unhappy. It is clear therefore, that economics and the economic life, while prodigiously important, are after all not the chief things. You cannot have sound economics unless you have sound ethics. You cannot in the long run prosper materially unless you act righteously. Thus the fundamental economic problem of the dentist, as of everyone else, is bound up with the human problem, the ethical problem, the problem of life.

CHAPTER TWELVE.

THE SOCIAL EVIL.

In 1877, in an early attempt to grapple with the difficulties of the social evil, Professor Sheldon Amos wrote:

The subject of this treatise encounters peculiar obstacles in the way of public and thorough discussion. It receives only scanty notice at the hands of public journalists. It can never form a topic of common conversation. It carries with it a reminder of shame, miseries, and wrongs which must be always distressing, and therefore instinctively shunned. One side of the subject, again, is appropriated, for the most part, by special members of a very special profession. On all these grounds it might be expected that laws and police regulations on the subject would resemble those plants which prosper best, or only, in the shade.

Since these words were written the conditions have changed materially. The discussion is no longer limited to the medical profession. It is being recognised, and especially by the broadminded physicians themselves, that the problem is fundamentally a social and ethical problem. Slowly but surely there is emerging a recognition of the fact that while there are indeed dangers in indiscriminate discussion, no progress can be made without a frank treatment of the subject and a dissemination not alone of recent medical knowledge, but also of the relevant teachings of modern ethics, economics and social science.

In the fall of 1900, the city of New York was startled by discoveries in regard to the spread of the Social Evil in certain districts, and as to the extent of flagrant offences against public morality and common decency. A meeting was held at the Chamber of Commerce, as a result of which the Committee of

¹ Preface to a Comparative Survey of Laws in Force for the Prohibition, Regulation, and Licensing of Vice in England and Other Countries. London, 1877.

Fifteen was called into existence with Mr. William H. Baldwin, Jr., as chairman and the present writer as secretary. The objects which the Committee of Fifteen undertook to accomplish were thereupon stated as follows:

- (1) To institute a searching inquiry, uninfluenced by partisan considerations, into the causes of the present alarming increase of gambling and the Social Evil in this city, and to collect such evidence as shall establish the connection between existing conditions and those who, in the last analysis, are responsible for these conditions.
- (2) To promote such legislation as shall render it less difficult to reach offenders, and as shall put an end to the shifting and division of responsibility in the local administration of the laws relating to vice and crime, to the end that public officers and their subordinates may be held to a strict accountability for their acts.
- (3) To suggest and promote the provision of more wholesome conditions and surroundings, in order to lessen the allurements and incentives to vice and crime.

The Committee at first devoted its attention chiefly to the first object. Its corps of investigators collected a mass of information and evidence, a part of which was utilised in bringing some of the offenders to justice, and in exposing the notorious "cadet" system. The Committee also co-operated with the framers of the new Tenement House Bill in securing its enactment into law. As a result of this law and of the facts collected by the Committee, it became possible to take measures for the eradication of prostitution from the tenement houses.

The overthrow of the control of the municipal administration by Tammany Hall and the success of the Reform movement in the municipal campaign of 1901 (a campaign in which the information supplied by the Committee of Fifteen constituted a very important factor) rendered it possible for the Committee to abandon any further work of a police nature or having to do with the supervision of public morals.

The third object of the Committee, however, was to promote satisfactory legislation on the subject of the Social Evil. A study of the history of regulation and its application to con-

ditions in New York was made and published in 1902 as The Social Evil. With Special Reference to the Conditions Existing in the City of New York. A second, enlarged edition, by the present writer, appeared in 1912.

The Committee had called special attention to the evils connected with the so-called Raines-Law hotels. A few years later a Committee of Fourteen, including in its membership some of the old Committee was organized for the purpose of suppressing these hotels. The new Committee also investigated the relation of the magistrates' courts to the women of the street, as well as the disposition of disorderly house cases. Its studies led to the creation of the Page Commission, formed to investigate the courts of minor criminal jurisdiction.

The report of that commission resulted in the passage of the so-called Page law, which revolutionized the procedure in the city magistrates' courts, and which introduced a host of other beneficent changes. It included, however, one section, which had been slipped into it without adequate discussion, largely through the efforts of a physician who had been much influenced by the European "reglementists."

Section 79 of the Page law provided for the compulsory examination of prostitutes, and their detention if found diseased, thus embodying some of the chief provisions of the French system. The law went into operation in September, 1910, and at once gave rise to a series of protests. It was at one of these sessions that the present writer delivered the address below. A suit was brought to test the constitutionality of the law, and when the lower court declared that particular section unconstitutional, its enforcement, pending appeal, was discontinued after eighty-four days of actual life. A few weeks later the Court of Appeals declared section 79 unconstitutional on the ground that the nature of the sentence for conviction was made to depend upon the report of a physical examination, without an opportunity for a hearing upon the facts entering into the report. Thus came to an end, probably for many years, the effort to introduce by law into any American city the European system of "reglementation." The address follows:

¹ Address at the Meeting of the Society of Sanitary and Moral Prophylaxis, Dec. 22, 1910.

On such a question as this, where good men differ so fundamentally it is perhaps wise to approach the subject from a somewhat broader point of view. Some who are in favor of section 79 of the Page law support it frankly and avowedly as the first step—as an entering wedge to some system of reglementation. Others desire to draw a sharp line between reglementation or regulation on the one hand, and the Page law on the other. In the first part of my remarks, therefore, I shall address myself to those who in one way or another favor reglementation; and, secondly, I shall speak to those who, while theoretically opposed to regulation, are nevertheless in favor of the Page law.

1. The Policy of Regulation.

This is not the place to call your attention to the historical aspects of the subject. There is only one point I should like to emphasize, as leading up to my position—and, I may say in this respect that it is the position which, so far as I know, is taken to-day by all the surviving members of the Committee of Fifteen. It is a remarkable fact, that when we came together to investigate the problem, knowing very little about it—just about as much or as little as does the ordinary man or woman,—the great majority of us were in favor of regulation on the principle that it could do no harm and might do some good. It was only after a prolonged study of the situation, as regards both the facts and the general principles, that the committee came unanimously to the conclusion that reglementation was inadvisable and inadmissible. Let me then devote a few remarks to an endeavour to point out why we came to that conclusion; for the arguments that held then would hold with most of us to-day.

The method used in ancient times in dealing with this subject was to regard it from the religious, or political, or even the fiscal point of view. We all know that prostitution was subject to various forms of regulation in Greek and Roman times, and that it was made subservient to the political ends just as was the marriage relation itself; and we know, furthermore, that the government in many cases secured large revenues from the quasi-religious organizations under whose ægis these practices were carried on. In the Middle Ages the situation was entirely

different. Partly as a result of the Christian doctrine, but chiefly under the influence of the newer civilization of Germanic types as against the old Romanic type, an effort was made to repress the hideous evil as far as possible. It is only with the spread of commerce and industry in the twelfth and thirteenth centuries that we find in the various Italian, German and French towns a different attitude taken by the public. It was then that the importance of the earlier religious objections diminished, and that these unfortunate women were formed into guilds, very much like the various classes of artisans, and craftsmen, whose organizations were made to minister to the fancied ends of the communal welfare. Only the other day I was reading in a work on Japan that, in one of the inland towns, there takes place every five years a great civic procession, headed by all the loose women of the town garbed in beautiful costumes, and every man, woman and child goes out to witness the spectacle. How many realise that this was an early quasi-religious custom throughout Europe? It was a feudal idea which gave rise to this custom in Europe. just as it is a survival of feudalism which explains its continuance in Japan to-day. It is hence not to be inferred that the Japanese are less moral than we; it means simply that they still have vestiges of a feudal civilization which with us has passed away. In so far as any effort was made by mediæval governments to regulate the institution, it was chiefly to maintain public order. Only after the outbreak of the syphilitic scourge in the sixteenth and seventeenth centuries throughout all the European countries was a different attitude assumed.

In modern times, however, has come the evolution of the true democratic and social way of regarding the problem. The modern way of looking at the problem differs from the mediæval in three respects:

First, in former times the loose women were treated as outcasts and aliens and were compelled to wear a different garb or costume. At present, with the economic development of modern times, we have gotten over the idea of the alien character of these women, and with the growth of the democratic spirit we feel that they are with us and of us. They may form a separate class, indeed; we may pity them or hold them in contempt: but in the larger sense they are a part of us.

The second distinction is the emergence of the ethical or moral ideal. This had never—or almost never—been realised before. Nowadays every one feels that whatever may be the method of dealing with these unfortunates, any scheme which has not directly or indirectly, purposely or incidentally, a moral connotation, is bound to fail.

Third, above all, with the growth of modern medicine and modern science, we have learned to emphasize the sanitary aspect of the problem. In fact, this is the one which really confronts us at present. By regulation in modern times, we mean sanitary regulation, and this brings us to the objections to the system of reglementation as a whole. These may be summed up as follows:

In the first place, there is always a conflict between sanitary and moral ends. I do not mean to say that sanitary precautions may not go hand in hand with ethical ends, and that certain moral ends may not also involve sanitary precautions; but in these points of contact there is apt to be far less of harmony than of conflict. We find a difference of opinion, for instance, between the doctors' point of view and that of the police. This has been brought out fully in the history of the Parisian, the Viennese, and the German systems; and it is clear, of course, why it should be so. The sanitary point of view does not look at all to the chances of reformation. The moral point of view always holds up, as an ideal, at least, the opportunity for reformation. It demands that those women who are unfortunate rather than perverted, or at least that those who are, occasional rather than professional prostitutes, and who wish to reform, may be afforded an opportunity to do so. It is because of this conflict between the ethical and the sanitary purposes of regulation that we find such an opposition between those who look at it only from the sanitary point of view, and those who regard it from the larger and more social point of view. Sanitary regulation may tend, and has frequently tended, to convert a woman from a temporary into a permanent prostitute.

Second, regulation is apt to strengthen the belief that it is permanently inevitable, and that, so far as it responds to a general need, prostitution is something not only inevitable but beneficial. That is a point upon which the physician can speak more author-

itatively than those who look at it from the moral, economic or ethical point of view. Not a few physicians, however, take issue with the older doctrine which believes in the imperative necessity of sexual intercourse for the young man. To the extent that a system of reglementation impliedly recognizes this function of prostitution, it runs counter to the newer doctrine.

Third, every system of reglementation tends to make men believe that they may indulge in these practices with comparative safety. Anything that tends to render vice innocuous tends to incite to debauch. To the extent that the state whitewashes the situation—and it can scarcely fail to do so when it officially regulates the practice,—to that extent it tends to augment the increase of the demand itself. It is for this reason that many who would perhaps otherwise be lukewarm, or disinclined to take any definite attitude on the subject, are ready to oppose the system.

In the fourth place, the system of reglementation, especially in the Romance countries, shows that regulation is scarcely of any use at all, unless it tolerates and even favours the houses of ill-fame. You cannot get at the clandestine prostitute; you can, to a certain extent, reach the houses of ill-fame. Consequently, in the very country which has done the most in this direction, we find that the indirect result of the system is to encourage such houses, because it enables the police to regulate with a little more success. Not alone does it encourage houses of ill-fame, but it has also tended—in these Romance countries, at all events—to increase the subordinate and ancillary features—the dance-houses, the giving of liquor in the brothels, and making them veritable palaces of delight, as they have been called.

In the fifth place, the chief objection to regulation is that the state cannot regulate anything without recognizing it; and that the state in modern times has no business to lend its active support to prostitution through recognition. In modern times, for instance, we have no state lotteries. Whereas in years past churches and other laudable institutions were built and aided by lotteries—Columbia University, for instance, was started by a lottery,—in modern times the state no longer lends its support to lotteries. At least, our own country, as well as most other civilised countries—with the surprising exception of some of the

German states,—has abandoned state lotteries altogether. In the same way, we in America and other English-speaking countries believe that by legalising vice the state identifies itself more or less with immorality, and that by helping to maintain a class of such unfortunate women the state tends to outrage the decent element of society, and discriminates between men and women offenders. I can but sympathise with those women who maintain that this is, to that extent, an insult to womankind.

Finally, we do not believe in reglementation, because regulation does not regulate. Even in those countries where they have regulation, the most recent opinion, even among its advocates, is that if it does any good at all, it accomplishes so little as to be negligible; while, on the other hand, there is an increasing number of scientific men in France, Germany, Holland and other countries on the continent who are assuming an attitude of dissent and opposition.

We need, therefore, not spend any more time on the problem of reglementation as such. It may appeal to certain of the European countries, which are accustomed to the continual interference of government in the smallest and most detailed affairs of daily life; but it may safely be affirmed that reglementation as such will not appeal to the American public.

2. The Page Law.

Let us come, then, to the Page law. Some say: it is not regulation; we don't want regulation, but we favour the Page law because it is simply an attempt to protect the community from a sanitary point of view—not to regulate the traffic. As regards this point, it must be said that the distinctions sometimes made between the Page law and the French system of reglementation are exceedingly tenuous. It is claimed, indeed, that in the one case we deal only with vagrants or with criminals, whereas, in France, they deal with any person found walking the streets. But is that really a distinction? Is not every one who is found continually walking the streets in this city to-day considered a vagrant? Is there really any distinction between the details of the French system and those of the Page law, so far as that is concerned? I fail to see it.

Secondly, it may be said—and that is an opinion that deserves respectful consideration—that the Page law is a measure of beneficence in that it provides humane treatment for the unfortunate women who happen to be diseased. Here, however, we must remember that the number who are affected by the Page law are so few. so infinitesimal—perhaps a few dozen or a few hundreds, as compared with the tens of thousands of prostitutes in the city -as to be negligible. De minimis non curat lex. But even conceding that we do deal with a large number, is it necessary to have a law so degrading and humiliating as the Page law in order to give these unfortunate women the benefits of medical treatment? No one would object to an increase in our facilities for treatment—hospital, reformatory, or otherwise,—designed to give these women a chance to regain their health. But to say that we need the Page law with its system of finger-print identification, and its degrading and compulsory examination in the police court in order to effect that result, is a very different matter. The end may be desirable, but the particular methods employed to reach that end are, in my opinion, exceedingly undesirable.

In the third place, the Page law makes use of the ordinary policeman and the ordinary police court. Now, if there is one thing on which most scientists and experts who have dealt with the problem abroad agree, it is that of all the people in the world the most unsuitable to administer such a system are the ordinary police and the ordinary police courts. For that reason, France, which has led the way in this respect, has a separate body known as the police des mœurs, quite distinct from the ordinary police and not subject by any means to the same temptations and weaknesses. Even assuming that everything else about the Page law was good, this one fact would, in my opinion, be sufficient to convict it.

Fourthly, the Page law, as I take it, seeks to achieve one end and yet confuses it with another. Its object is sanitary control; it desires, to a certain extent, reformation; and it attempts to accomplish these things by punishment. The confusion between the punitive and the reformatory ideas is a gross one. While one may sometimes kill two birds with one stone, you generally have to choose between them. And in this case a choice is

necessary. The kind of punishment meted out by the Page law is not calculated to reform.

We come now to the principal indictment against the law. I should say that the chief aim of the Page law, which is to protect the health of the community—and let us frankly confess it: primarily, the health of the patrons, the health of the male sex,—is not attained and cannot be attained, because the sanitary protection turns out to be illusory. It is here, perhaps, that I may venture to speak with a little more assurance than in those other domains which are those of the expert physician or even the sociologist. For it is here that certain economic considerations come into play. After all, we are dealing here with services which have a price, and like everything else which has a price, it constitutes an economic problem. It has, of course, its sanitary, moral and social aspects; but none the less there is a decided economic side to it. Now when we say that it is regulated by demand and supply we don't say much about it, for the province of the economist is to study in detail the forces which affect demand and supply. Some contend that it is a simple arithmetical problem: that if you take away a certain number. the total will be less than before.

I should say yes; if you have a lake of water and take out a bucketful, of course, arithmetically, there is less water in the lake than before: but practically is there not the same amount as before? Removing ten or twenty or a hundred from the tens of thousands of these unfortunates is so insignificant that you may virtually disregard it. But even if we grant that you do remove a large number of women in this way through the Page law, what would be the result? If there is one thing definitely fixed in economic science, it is that when you are dealing with reproducible goods, things manufactured at practically the same cost, the chief point is not the supply but the demand; i. e., the supply always adjusts itself to the demand. When you do nothing to affect the demand, and when you affect the supply only at one end, you are really not changing the situation. Take a mill-race with the water running in at one end and going out at the other. If you take water out of the lower end but do not change the inflow—the upper end—the level remains the same. The Page law at best takes out some of the supply at the lower end, but that does not prevent a corresponding change in the supply at the upper end; and as long as you do not alter the total supply the situation remains the same. In other words, the supply of these unfortunate women on the streets will be made good from other sources. I concede that if you were to stop the water at the upper end you might do some good; but I am not sure how much, because there is another accepted economic principle: i. e., that by diminishing the supply you do not diminish the demand unless the point of saturation has been reached. Suppose that you have a large number of liquor saloons, and that you diminish the number by a tenth or a quarter. Are you checking the supply? Will not the only result be that you will increase the patronage of the remaining liquor saloons? It is not until the saloons become uncomfortably crowded that the patrons would be tempted to go somewhere else, and then, indeed, if there were nowhere else to go to, the effect would be felt. Therefore, even the diminution of the supply through a police regulation which would prevent street-walking. would attain the desired result only if it brought about a decided diminution in numbers.

The Page law, however, not only fails to affect the supply at all, leaving the demand as before-but it affects the demand the wrong way. The only manner in which supply can affect demand is through a change in the quantity or quality of the supply. The quantity of the supply now, as we have just seen, is not changed by the Page law, but the quality is changed. To the extent that people will get the idea that the street-walkers are not diseased either after they have been treated or when they have been discharged as not in need of treatment, the imagined improvement in the quality of the services offered for sale will tend to attract purchasers who would otherwise be somewhat suspicious or on their guard. It will tend, in other words, to augment the demand. At all events, it is reasonably sure that as an economic proposition the Page law is illusory, in so far as concerns the hope that it will bring about a decided diminution in prostitution.

But, finally, if I do not believe in regulation and if I do not believe in the Page law, in what do I believe? I think that that is a fair question. Every one has a right to object to a

man or a woman who says "Hands off"; or, like the ostrich, puts his head in the sand and says: "Don't let us talk about it, it does not exist." The way to deal with the problem is to influence both supply and demand. You can affect the supply in several One of these is to secure the introduction of general economic and social measures which tend to raise the whole plane of the standard of life. For the problem is, nowadays, primarily a social and economic one. It is, in large measure, the problem not of the moral pervert, but of the woman who has not enough to live on and who, therefore, takes to this practice as a means of livelihood. You can affect the supply by doing what is needful in connection with the white-slave traffic. Furthermore, you can change the character as well as the quantity of the supply. You can accomplish this by regulating and improving the dance halls and the Raines-Law hotels, and by checking the other conditions that tend to convert the occasional into the professional prostitute. On the other hand, you can affect the demand in many ways, some of which have been emphasised so magnificently by this society under whose auspices we are meeting to-night. You can affect the demand by proper education; you can provide the opportunity of securing knowledge, and do much to make the situation very different from what it is to-day. You can change the demand by requiring a license of good health and freedom from these diseases before marriage—a by no means impracticable or visionary scheme, and one the necessity of which is already beginning to be recognised in some of our states. You can alter both demand and supply in many other ways which it is not my province to point out; for it has been a critical rather than a constructive thought which I wish to present to-night.

The great trouble with all our efforts has been the lack of continuity of effort. The Committee of Fifteen did what it could, but the community soon lapsed from the stage of enthusiasm and high moral force; the flame which burned so brilliantly for a time died out—and so it is with most of our efforts at reform. This society takes up one phase of the subject—only one little phase, and yet in itself large enough; for without this society it would have been impossible to speak to you to-night

as I have done. To have accomplished merely the possibility of a free discussion of such subjects is no mean result.

I want to plead for an organization which will remain constantly in operation, which will study these questions, which will not take a mere snap-shot at them, as did those worthy gentlemen who enacted this particular provision of the Page law, but which will study the whole problem from the medical standpoint, the social standpoint, the economic standpoint, and the moral standpoint; and which will not alone prepare legislation, but will help the government in administering whatever laws or ordinances may be found to be desirable. If the result of a discussion like this is to bring into existence an organization of a permanent character which will create and maintain a continuity of effort, we may look forward to the time not indeed when we can extirpate prostitution—for that will not come very easily nor very quickly; not to the time when we can discover a panacea for the trouble; but to the time when, even if we shall not be able to attack the trouble in front, we may be able to effect a breach in the side, which will gradually but surely lay bare more and more of the hideous enemy that constitutes, perhaps, the worst of our modern social evils.

CHAPTER THIRTEEN.

THE REAL UNIVERSITY.

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1. The Spirit of the University.

My hope is to portray, if I can, the characteristics of the real university—to set free the elusive spirit which is still held captive and struggling to express itself. The explanation must be true not only historically of Athens and Alexandria, Rome and Berytus, Salerno and Bologna, but actually of Berlin and Oxford, St. Andrews and Paris, Harvard and Columbia.

Let us scrutinize the usual shibboleths. We are told first that the object of the university is to diffuse knowledge. But the secondary and the high schools do the same. The university is not simply higher, it is different. The second explanation, advanced especially in our country, where the so-called university is often a congeries of technical schools held loosely together by an insignificant college of liberal arts, is that the university is designed to give professional training and to prepare students for the activity of a work-a-day life. But surely proprietary medical schools or independent business institutes, multiplied even to the nth degree, can not constitute a university. Something else must be injected into them before the metamorphosis is complete. The most common contention, again, is that the function of the university is to promote science. But this also is clearly defective. It is not true historically. It would indeed be venturesome to assert that the trivium or the quadrivium, with their meticulous distinctions and hair-splitting disputations, represented the pursuit of science. Neither scholasticism nor humanism, but the learned societies of the seventeenth century, mark the beginnings of science. Moreover, the pursuit of science is not confined to the university. The Rockefeller and Carnegie Institutes promote science, but are obviously not universities. Furthermore, to accept the promotion of science as the criterion of the university would be to exclude the very professional schools of which we have just spoken. The older institutions still practise this exclusion, but only in part. Who will say to-day that the training of the lawyer, the physician and the chemist-included even in Berlin-is any more important than that of the engineer, the architect or the teacher? What is the distinction to-day between the learned and unlearned professions? To exclude from the university the training for the newer professions is a confession of belated medievalism. But if the professional school, which is supposed to inculcate art rather than science, is rightfully a part of the university, how can we assert that the university stands only for science? And lastly, do not the fine arts actually find a growing lodgement within the university? Are not music and painting and poetry and even sculpture coming to form an integral part of the curriculum? But surely art is not science. Thus from every point of view the promotion of science, deeply as it may enlist our enthusiasm, does not and can not constitute the distinctive purpose of the university. But if, then, neither the diffusion of knowledge, nor professional training, nor the pursuit of science is the real spirit of the university, what is, and how shall we find it?

Perhaps we can reach our answer in a roundabout way. The three great social institutions that have been developed by mankind, in the attempt to achieve the harmony of life, are the state, the church and the university. The state stands for the principle of order; its contribution to social harmony consists in the promotion of group welfare by the associated effort which we call political action. Whatever be our differences as to the exact metaphysical conception of the state, whether we ascribe to it merely the night-watchman function or the more positive duty of constructive achievement, no thinker will deny that the state stands for compulsion or enforced order.

The contribution of the church to social progress is the endeavour to achieve the spiritual unity and the internal harmony of the individual. To many, indeed, especially in this audience, the only church is the laboratory; the only religion is science. But in the ripe judgment of what is now again perhaps a growing class we need something more than science to give us the glow of ethical fervour. Science may enable us to ascertain the truth; we need something else, call it what you will, to urge us to the right. Science may give us the criterion; the right kind of religion strengthens the motive. Purge it of its dross, liberate it from its superstitions and excrescences, there still remains something which alone can satisfy the craving for spiritual unity and feed the hungry soul.

In contrast to both of these stands the university. Its contribution to social progress may be summarized as the endeavour to promote and to impart intellectual freedom. The function of the state is to supplement the individual; the function of the church is to moralize the individual; the function of the university is to emancipate the individual. The state stands for order; the university for freedom. The church seeks for spiritual truth; the university for intellectual truth. The state stands for power; the church stands for unity; the university stands for independence. The state is the orderer; the church is the harmonizer; the university is the emancipator.

In what sense, however, is this emancipation to be understood? First. I should say emancipation from the thralldom of nature. Intellectual freedom means liberation from superstition and all the primitive manifestations of mental enslavement. The university achieves the victory of mind over matter, of man over nature. Second, I should put mastery over one's self. To secure this mastery we need to strike off the fetters of prejudice, the bonds of convention, and above all the shackles of sentiment. Civilization means the control of the impulses by the intellect: without the fire of perfect freedom the rough ore of human nature will not be transmuted into the pure gold of human possibilities. The university, through the liberation of the intellect, is humanizing mankind. Thirdly, the university stands for accomplishment. We need to do more than the mere routinier or the narrow specialist. The real expert must have a broad basis and a wide vision, with the creative capacity. The real expert is the surgeon who performs a new operation, the achitectengineer who builds the novel skyscraper, the lawyer who distils from the books and the cases à new and illuminating principle. To produce this type of men we need the inquisitive, the imaginative spirit, which is the concomitant of true emancipation. Finally, the fourth aspect of intellectual freedom is the courage which it implants in the struggle for social and political justice. The spirit of social unrest is to some a hydra-headed monster or Frankenstein; to others, the angel with the flaming sword. What greater rôle for the university than to help mould public sentiment, to penetrate the hard crust of convention and tradition with the fertile showers of a free spirit, or to temper the impetuosity of impulse with the ripe wisdom of the emancipated intellect.

The old antimonies and shibboleths are thus largely fallacious. In lieu of the contrast between the scientific and the professional, the abstract and the concrete, the pure and the applied, the ideal and the utilitarian, the theoretical and the practical, we must put the new contrast between the progressive and the traditional, the adventurous and the routine-like, the creative and the receptive. The time always comes when we must cast off our moorings and embark on the stormy sea of the unknown. Without the stout craft of experience, without the rudder and compass of reliance on the best judgments of the past, the adventure may be hazardous. But unless we keep the prow pointed forward, and resolutely press on despite wind and wave, we shall never make the distant port or conquer the promised land.

If, then, the spirit of the real university is to promote and to impart intellectual freedom, we must be careful not to separate the two sides. The promotion of intellectual freedom connotes research; the imparting of intellectual freedom implies teaching. There can be no true university without both. Research may be found in the learned society or in the scientific institute; teaching can be carried on in the proprietary school. The university is neither the one nor the other, but by the reaction of research and teaching upon each other transforms both into a higher and unique compound, precious to instructor and student alike. For the former needs the enthusiastic and eager student to spur him on and to replenish his creative energy; while the latter needs the inspiration both of method and of personality. The true university is the one wherein, by this pro-

cess of mutual reaction, intellectual freedom is promoted among the instructors and imparted to the students.

The obstacles and dangers to this university spirit may be classed as external and internal. The external perils are, to-day, the political and the economic conditions. Passing strange as it may seem, the university spirit is jeopardized by democracy, no less than by autocracy. For democracy levels down as well as up, and is proverbially intolerant of the expert. The concentrated and overwhelming public opinion that is so characteristic of the modern community is at once the chief safeguard of the democracy and the chief menace to the real liberty of the individual. Fanaticism becomes no less relentless or dangerous because it assumes a political rather than a theological garb. In the autocracy all are subject to the tyranny of the ruler; in the democracy all are likely to be subject to the tyranny of public opinion. The true university must afford an inviolable refuge from each.

Just as the political environment sometimes creates intolerance or repression, so the economic environment occasionally engenders contempt or suspicion. In a youthful community, especially where the parsimony of nature invites unremitting toil, each self-appointed empire-builder is apt to regard the university with scarcely veiled contempt. And when the backwoods society has given way to the complexity of modern industrial life, the differentiation of economic classes inevitably leads to a divergence of interests which is reflected in the university all the more strongly as the university itself expands its scope and multiplies its activities. Instead of the thinly veiled contempt of the early period, the university spirit has now to guard itself against the mutual suspicions engendered by the economic antagonisms of a highly developed industrial society.

The internal perils I should characterize as the college and the professional school. The college is indeed a part of the university, but only in the sense of being a threshold to the university. It has played a distinguished rôle in our development and is, perhaps, destined to retain that rôle. But no greater mistake could be made than to attempt to convert the college into the university by applying to it university principles. The university stands for intellectual freedom, for self-reliance, for

rigorous methods; the college stands for general mental discipline and for a liberal outlook on life.) We must not confound them as to student body, as to method, as to instructors. indeed, not the slightest need for conflict. On the contrary, there should be the fullest cooperation and mutual respect. But the college which forms a part of the university must be radically different from the independent or small college. It can not remain alone and apart. It must not limit its horizon to the purely parochial view. If it is primarily the approach to the university, it must fit into the university structure and not be permitted to dominate that structure. It must be animated in its every act by a finer and larger loyalty to the whole institution of which it forms a notable part. The real university can never emerge from the left-overs of the college. A great college is compatible with a great university; but if we regard first the college and then only the university, we may, indeed, have a great college, but we are sure to have an insignificant university.

Perhaps more important, however, is the menace of the unregenerate professional school. If what has been said above is true, the university must train not alone the doctor and the lawver. but the members of the other professions as well. The imperious demand of the modern community that the university shall render public service and shall be in close touch with every phase of instructed social activity, is clearly irresistible. But to justify the inclusion of all these schools in the university we must insist on their breathing the spirit of the university, which, as we have seen, comprises research as well as teaching. The narrow professional training can not produce the intellectual emancipation for which alone the university stands. He, therefore, misinterprets the university who thinks that the object of the law school is simply to turn out a good lawyer, of the medical school to produce a good practitioner, of the engineering school to create a good engineer. The true university law school must be, as well, a school of jurisprudence; the medical school must train the future discoverer of new truth: the engineering school must develop the creative expert. As Lord Verulam told us long ago: "If any man thinks philosophy and universality to be idle studies he doth not consider that all professions are from thence served and supplied."

The university spirit, therefore, demands with inexorable logic that every instructor in the professional school should have made, and should be making, positive contributions to the subiect which he professes. That he should be a good teacher, able to impart the correct method, goes without saying; but that he should possess the creative spirit is equally imperative. The true university should have no room in its law faculty for the socalled leading lawyer; in its medical school for the successful physician who is adding nothing to medical science; in its engineering or other professional school for the busy practitioner who is doing, perhaps a little better, what everyone else does. In the true university, research is no less important in the professional schools than in the non-professional faculties. When the law school becomes also a real school of jurisprudence, when the medical school is regarded as the home of medical science, and when the other professional schools concern themselves with deepening and broadening the bases of their respective disciplines. then for the first time will the professional student realize what intellectual freedom means, then will the university no longer be menaced by unregenerate utilitarianism, then will the traditional opposition between the old faculties and the new disciplines fade away, then will every part of the institution be united by the same bond and animated by the same spirit. Then, in short, will emerge the real university.

2. The Form of the University.

If, now, we turn from the spirit to the form of the true university, we are opening a huge volume of which there is time to turn only a few pages. The four characteristic institutions of the American university are, respectively, the trustees, the president, the faculty and the student body. With respect to each of these there has recently been much discussion and not a little criticism—symptoms of the healthy discontent which is the first condition of progress.

The simplest problem is that of the student body. The true university will seek not for numbers, but for quality; it will give its students the fullest freedom of action and will seek to reduce the red tape of supervision to the smallest possible

minimum. It will distinguish sharply between the collegian and the university student at a point not yet definitely settled but which is in process of being reached. And, notwithstanding the delightful essay of William James on the Ph.D. octopus, it will continue to regard the doctor's dissertation, however inadequate, as a precious thing. For, although not all Ph.D.'s can be great thinkers, yet the doctor's dissertation, like the masterpiece in the mediæval guilds, is an indication, however imperfect, of the mastery that has been achieved in the method, and of the glimpse that has been obtained of the screne and lofty heights of unfettered thought and of creative power. But, on the other hand, the student also must learn to develop the spirit of self-reliance; to remember that the time has come for independent achievement; and to feel, on crossing the portals of the university, some of that sacred awe experienced by the devout worshipper on entering a noble cathedral.

And secondly, the faculty. Faculty originally denoted the power of accomplishment. The faculties of the university were, and still are, its real power of accomplishment; and in that sense the faculties are the university. Historically, indeed, the universities were sometimes guilds of students as well as of instructors; and not infrequently were the professors ingloriously subject to the control of their auditors. But despite this, it was even then the faculties that actually constituted the university.

But if the faculties really constitute the university, we must be careful not to have the wrong kind of faculties. If the true university is the embodiment of freedom, it goes without saying that the professors must be free: free to think, free to express their thoughts, free from crushing administrative duties, free from unduly long hours, free from financial embarrassment, free to elect their representatives, free to share in the choice of their successors or departmental colleagues. To be worthy of this freedom, however, is the indispensable correlative. The freedom to express their thoughts, especially in extramural utterances on hotly controverted questions of policy, must be tempered by the feeling that they can truly represent their institution only by bearing the torch of emancipation—emancipation from prejudiced thinking and from the extremes of comfortable obscurantism or callow radicalism; that they never can truly

represent it by indulging in the cheap enthusiasms of intemperate partisanship. Freedom from administrative or scholastic duties must not be utilized as so much leisure to enter into more or less dubious outside lucrative pursuits, oblivious of their higher duties to the jealous mistress, science. Freedom from financial worry must not be employed for vegetation or for peaceful browsing on fields which ought to be their avocations. And finally, freedom to elect their successors must not be abused by the unworthy motives of nepotism, or social cliquism, of inbreeding, or of fear of being overshadowed. When these obligations are thoroughly realized, and not till then, will all the faculties be the embodiment of the real university.

The president is the product of a peculiar development, unknown elsewhere in the world. Unlike the mediæval rector, he is not elected by the students; unlike the modern rector, he is not elected by the faculties. He is a survival from the early American college where some permanent head was needed to select and to control the schoolmasters and to discipline the students. His lot, to-day, is not entirely enviable—for he has to mediate between the trustees, the faculty, the students, the graduates. the benefactors and the general public, each not infrequently with divergent views. To those, however, who would incontinently abandon the presidential office as incompatible with the true university the following observations are pertinent. Even in the continental universities of Europe the minister of education, or his delegate, performs not a few of the functions of the American president. Secondly, it is doubtful whether the rapidly proceeding metamorphosis of the primitive college into the great university does not require a policy and an organization of greater permanence than can, in all likelihood, be secured by the shifting representation of a perpetually changing faculty. Thirdly, autocracy never gives way to democracy by any such sudden jump. Just as in the political life of Great Britain we find the four stages of absolutism, constitutional monarchy, aristocratic republic and the still inchoate radical democracy, so in our university life the Anglo-Saxon idea of progress can be realized only by a gradual transformation of the office and the function of the university president. We can already now discern the outlines of the inevitable transition. The president will

be a scholar, endowed with tact and administrative skill. He will treat the members of the educational staff as his colleagues and will endeavor to voice their collective judgment. He will avoid the mistake of confusing the true university spirit with mere administrative efficiency, and will insist upon each faculty having a voice in the selection of its dean. He will see to it that mere machinery is subordinated to scholarship, and that the substantial university rewards of both emolument and position go, primarily, to those thinkers who have shed lustre upon the institution. He will protect himself against the occasional incompetence or shortsightedness of the departments, divisions, or even schools by subjecting their recommendations for appointment or promotion to a body of impartial scholars who have shown by accomplishment their devotion to the university ideal and who will thus be able to hasten the transition of our present amorphous institutions into true universities. If the president does all these things, he will probably remain for some time to come the head of that aristocratic republic, which will deserve to become a real democracy only when the ideals of the true university animate every instructor and every student.

Finally, the trustees, that still more unique product of American life. To the trustees is delegated, primarily, the financial responsibility for the university. And while we must not forget that the faculties of the mediæval university attended successfully to all their financial concerns, it remains none the less true that the American trustees represent, in this respect, the activity of the government officials in Europe. Moreover, not to speak of the reformatores studii in the Italian universities of the fourteenth and fifteenth centuries, we find boards of trustees in the newer continental institutions—scientific and professional—which are not yet incorporated into the universities or which are not under the immediate supervision of the government.

We must indeed not forget that the trustees of the American universities are for the most part intelligent and hard-working supporters of the institution, whose devotion in many ways lightens the deliberative duties of the instructors. But if the trustees of what was formerly the small college are to remain in charge of the great university, they like the president, like the faculties, like the students must learn, as they are fast learning,

to represent the true university ideal. They must learn that the professors are not employees, that academic freedom must be unrestricted, that academic tenure must be permanent, and that in the rare cases when it may seem necessary to scrutinize the utterances or the actions of an instructor, not they but his colleagues, within and perhaps without the particular university, form the only proper and safe medium of investigation. They must learn to be on their guard against introducing into the university the methods or the spirit of the outside activities of which they are, perhaps, eminent exemplars. They must remember that in education, as in every vocation, even the practical view is best represented by the practitioner. They must learn to welcome the unofficial, nay even, as not a few institutions are now doing, the official and formal coöperation of faculty representatives in every question of university policy. They must learn to insist not alone on the obligations, but on the rights of the instructors, and must be prepared to defend them against the unfounded clamour of public sentiment and of private interest. In proportion as they will learn these truths, and will come to realize that they are trustees not merely for the material progress of the institution, but primarily for the perpetuation of the university ideal, just in that measure will they make themselves indispensable and beneficent.

In social life nothing lasting has ever been achieved without whole-hearted cooperation. We all-trustees, president, faculties and students-must learn to emphasize our duties rather than our rights; only through a self-sacrificing readiness to perform our mutual obligations can we justly insist upon our privileges. The chief obligation that rests upon us all is the recognition of, and devotion to, the true university ideal. Each one of us is in some respect in a position of authority toward others. Let us beware how we use this authority. Let us divest ourselves of the false notions that have grown up through tradition and perversion. Let us realize that in the true university we are all colleagues-teachers and students, deans and instructors, trustees and faculty; and that in a university there is no room for a sacerdotal hierarchy or an educational organization based on political or industrial efficiency. Let us remember that the spirit of the university is a subtle and elusive thing, all the more delicate and frail as it is pregnant of glorious potency. Let us preserve this spirit from the rough touch of blundering interference and of well-meaning but clumsy manipulation. Let us keep alive the tiny spark which is even now visible, and let us endeavour, by careful tending and by unselfish and intelligent devotion, to fan it into the flame of the real university spirit which will take off the chill of educational ineptitude and which will illumine, for all time, the path of intellectual development and of permanent social progress.

CHAPTER FOURTEEN.

THE AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS— ITS AIMS AND ITS ACCOMPLISHMENTS.

[This was the Presidential address in 1921, and was originally printed in the Bulletin of the Association, vol. viii, 1922.]

1. The College and the University.

The American Association of University Professors has reached the age of seven years. It still has before it the growing pains of a lusty adolescence, and it is entirely too soon to say what it will resemble when it reaches its period of maturity. But just as the fond parent cherishes the highest aspirations for his youthful progeny, so we older men who are helping to mould the fortunes of this Association may be pardoned if from time to time we endeavor to formulate its ideals, modified as they inevitably must be by the possibilities of accomplishment and by the experience of what has already been achieved during the short life of our Association.

In regard to certain points, there is room indeed for but little discussion. In the original call for the organization meeting certain aspects of our work have been so admirably presented that little or nothing can be added. We can, for instance, not improve upon the paragraph which sets forth the general purposes of our Association as follows:

"To facilitate a more effective coöperation among the members of the profession in the discharge of their special responsibilities as custodians of the interests of higher education and research in America; to promote a more general and methodical discussion of problems relating to education in higher institutions of learning; to create means for the authoritative expression of the public opinion of college and university teachers; to make collective action possible; and to maintain and advance the standards and ideals of the profession."

Several of these points have been elaborated in some of the admirable presidential addresses. It has, for instance, been made abundantly clear that our Association must be regarded not as a trade union, but rather as an association comparable to the American Bar Association, or to the American Medical Association—an institution designed to foster common interests and to uphold professional standards.

It is to be regretted, however, that there is still a lack of clear understanding as to the more precise aims of our Association, and this lack of understanding which is so evident in many who are not members of our Association is found even among some of our own members. One reason for this misapprehension, and for the failure to draw a clear-cut and sharp line between what is and what is not allowable, is to be sought in the educational transition through which America is now passing. We call ourselves an Association of University Professors but we have from the beginning, and especially since the recent liberalization of our entrance requirements, included also representatives from our colleges. While the presidents of our higher institutions of learning have seen fit to organize in separate bodies such as the Association of American Universities and the Association of American Colleges, we have one big union. There is indeed a valid reason for this, as we shall see in a moment; but, nevertheless, there remain certain elements in the problem which go far to explain some of our difficulties.

Let us, then, say a word about the college and the university in its influence on our problem.

In its origin there was no danger of confusing the two terms. The universitas was the community of scholars and at first primarily the community of students who banded together for a training in the studium generale. It might be described as denoting in its origin a scholastic guild within the studium. The term was soon applied to the guild of teachers—the masters of their craft, who became known as doctores or professores. After a time, however, we hear no longer of the universitas scholarium or even of the universitas doctorum, but of the universitas studii. By this time the word "university" was identified with the studium generale until it became synonymous with the institution, and acquired its modern significance.

The term "college," from the other Latin word for group, was also applied to both teachers and students. In fact, we hear of the college or guild of master-teachers even while "university" denoted the guild of students. But when the word "college" was first applied to students, it signified a group of the poorer students and more especially an eleemosynary foundation or home for the poorer students. The early college, therefore, was a group within a group,—a group of intimates who ate together or resided together in a separate building. The university for a long time possessed no home, the students meeting either in the professors' lodgings or in some public building.

The student body was at first composed of scholars of all ages -mature and immature. As an outgrowth in many places of the cathedral school, the university took the grammar boys at an early period and kept them until the final degree was awarded. This degree was that of doctor or master—for the one denoted the other. In conferring this degree, there were two steps-the licentiate, or license to teach (licentia docendi), and the subsequent formal installation into the guild of teachers through the inceptio, or commencement. Long before the student, however, became a master-doctor, invested with the full privileges of his high office, he might receive the right to do some elementary teaching. Borrowing the term from the ordinary craft guilds, he might become a bachelor, allowed to give certain so-called "cursorv lectures." In other words, the bachelor was a pupil-teacher. This right was conferred upon him after a so-called "determination," i.e., the maintaining or defending of a thesis, generally very boyish in character. The baccalaureate accordingly became a kind of inferior degree.

The schoolboys entered at an early age. In Paris, students were admitted to some of the colleges at the age of eight to nine 1 and had to be at least fourteen before becoming a bachelor, or twenty before attaining the licentiate. At Padua, after a time, students under thirteen were excluded from the vote. 2 While the time required to attain the degree of bachelor in arts with the customary curriculum of the *trivium* and the *quadrivium* varied

¹ H. Rashdall—The Universities of Europe in the Middle Ages, i., 492. ² Ibid., ii, 19.

widely at first, it settled down by the end of the thirteenth century to about four years, both on the continent and in England.

At first the only calling which could lay claim to be a learned profession was the church. The early mediæval doctor was accordingly in most cases a doctor of theology. In the course of time, however, two other callings were accepted as learned professions. First the law, the recognition of which as a science came with the growth of mediæval commerce and industry in the towns on the Mediterranean and then gradually spread to France and Germany. The development of the civil law in the south and the reception of the civil law in the north,—welcomed by the conservatives as a means of strengthening the existing rights of private property,—contributed to perpetuate the law faculties in the mediæval universities. A little later came the advance in medicine. The path, however, was not easy, as is shown by the fact that until far into the Middle Ages, surgery, which consisted for the most part of blood-letting, was practised chiefly by the barbers, a situation which explains the existence not only of the guild of barber-surgeons, but also the familiar red and white sign still found to-day in our tonsorial establishments. When we speak to-day of the doctor as denoting the physician, we forget that the doctor of medicine was the last of the doctors in the Middle Ages. The doctor's degree, moreover, now became not so much an evidence of ability to teach as a distinction coveted by the practitioner and of use to him in improving his means of livelihood. The distinguished lawyer, like the great physician, was always a doctor or master.

The growth of these new professions and the change in the real meaning of the degree led to interesting results. To keep a man four years in order to attain the bachelor's degree and then to require the additional years demanded for the doctor's degree became a considerable hardship. A doctor of medicine or of laws no longer felt like devoting to the attainment of the professional degree the many years originally required for the doctor of divinity. We therefore find a pressure upon the university to reduce the length of the period required for preparation for entrance upon active life. The simplest method of effecting this result was to shorten the preparatory period—for the need of technical training precluded any material change in

the professional course. This process was rendered easier by the improvement in what we should call to-day the grammar schools. First, the period for the attainment of the bachelor's degree was shortened to three years, then to two years. By the end of the fifteenth century it had been reduced to a year and one-half and even to one year, until finally it vanished, and with it the bachelor's degree itself. We know almost to a year when this happened in the various universities. On the European continent the process was completed by the sixteenth century, and the universities, relegating the introductory curriculum in arts to preparatory institutions, now devoted themselves entirely to what we should call the higher education, the completion of the course still being crowned by the customary doctor's degree, which admitted the candidate to the guild, or group of masters.

England followed a somewhat different path, although the reasons for this difference have never, so far as I know, been adequately explained. The colleges which were created at Oxford and Cambridge did not in their inception differ from those that we find in the continental universities. The fundamental distinction, however, between the English and the continental development is that in England the bachelor's degree was retained and conferred at a somewhat later age, while the higher degree gradually disappeared. It became customary to use the name "master's degree" in the Faculty of Arts, while the doctor's degree was reserved for the other faculties; and in the process of time, not only did the need of examination or even of residence for the master's degree disappear, but the rôle of doctor was reserved almost exclusively for the theologians. Thus, "at the present day," writes the historian of Oxford in 1895,1 "the highest degree which it is in the power of the University of Oxford to bestow has come to be the reward of eleven years passed in forgetting the minimum of knowledge required in the Pass Schools of the Faculty of Arts."

What is the reason for this remarkable difference? So far as I can see, it is due to two causes. In the first place, there was no science of law in England and therefore no learned legal profession. The common law of the time differed in fundamental respects from the civil law. The slowly developing common law

¹ Rashdall, op. cit., ii, 451.

occupied, with its insistence upon precedents, very much the same position that the Roman law did during its early period of growth. The civil law, as practised in the Middle Ages and as found in the pandects, soon developed all the earmarks of a veritable science. The legal discipline, as formulated by the great doctors in the mediæval law schools, attracted mature students by the thousands. In England, however, where there never had been any reception of the civil law and where admission to the bar depended not upon any evidence of knowledge but, as is still, in part at least, the case to-day, upon the eating of a certain number of dinners at the Inns of Court, there was no demand for a university law course and no need for the degree of doctor of laws or of jurisprudence. On the other hand, Oxford and Cambridge were both such small hamlets as to preclude the possibility of any adequate hospital service and the British medical education, such as it was, developed in London and in a few other large towns where there were hospitals, but no institutions of learning. There was accordingly in Oxford and Cambridge neither opportunity nor demand for a university education looking toward the degree of doctor of medicine.

Not only, therefore, was there in England no pressure from above to supplement the bachelor's degree with the doctor's degree, but the absence of any organized public-school system, in our sense of the term, resulted in no pressure being brought to bear at the beginning of the course. On the continent, the bachelor's curriculum was gradually ground between the upper and the nether millstones, the upper millstone of preparation for the learned professions, the nether millstone of the slowly developing secondary schools which ultimately became known as the lucée in the Latin-American countries and the gumnasium in the Teutonic countries. In England, where there was neither the upper nor the nether millstone, the higher faculties preserved only a paper organization, while the bachelor's curriculum remained, and the colleges in and through which the bachelor's degree was obtained became the really important parts of the university. In England, consequently, the university grew to be a mere congeries of colleges intended to educate the vouth of the ruling class and to give them a culture befitting a gentleman; on the continent, on the other

hand, the university became the means of enabling the more mature student from every class of society to secure a training calculated to fit him for a professional career, in the course of which the colleges, intended primarily for the younger students, disappeared and only the universities remained. What will be the result of the movement that is now visible in Great Britain it would be interesting to consider, but lies without the bounds of this address. But at all events it is easy to foresee that the recent reintroduction of professional training culminating in the doctor's degree will meet with much more resistance than was the case on the continent in abolishing or even modifying the existing colleges.

In this country, with its absence of tradition, the transition that has taken place is analogous to that which occurred on the continent. Our institutions of higher learning started out as colleges, which were nothing but grammar schools under theological auspices. So far as they trained for any career, it was for that of preacher. Precisely as on the continent, the requirements for admission were gradually raised, and the normal term for the acquisition of the principal degree, that of bachelor, came to be four years. The early American college was remarkably similar to the preparatory stage of the early mediæval university in four fundamental respects: theological control. content of the curriculum with its emphasis upon classics and mathematics, four-year duration of the course, and the degree of bachelor at the completion. Owing to English influence, there was no scholastic provision for any higher degree, except that the master of arts was occasionally granted in course, while preparation for law and medicine was carried on outside of the college halls.

The last few decades have, however, witnessed the beginning of the same movement as that which developed in the fourteenth and fifteenth centuries on the continent—on the one hand, the need for professional education; on the other hand, the multiplication and improvement of the high schools. Accordingly, similar results are discernible. In some colleges, the curriculum has already been reduced to, or made possible of accomplishment in, three years; in others, the curricula have been telescoped so as to provide for a shorter combined academic and profes-

sional course; in still others, a distinction has been made between the so-called junior and senior colleges, drawing the line at the end of two years; and in some cases, as notably in California, there is a strong movement to lop off entirely the junior college. What it took the continent of Europe, however, several centuries to accomplish can of course not be achieved here in a generation.

The lesson to be derived from this historical sketch is that the difficulties of our Association are in no small measure connected with the fact that nearly all our American institutions of higher learning combine the functions of the college and of the university, and that most of the teachers are engaged in work of both sorts. Whatever the future may bring forth, we are at present, so to speak, largely in a twilight zone. This ambiguous character of our American institutions—whether bearing the name of college or university—is accentuated by the fact that the fourth year of the college and sometimes even the third year has become in not a few of our larger institutions, in both form and content of instruction, indistinguishable from the succeeding years of the university proper. Although the two functions are performed largely in the same institutions and often by the same persons, it is obvious that they are, in important respects, distinct functions. In the one case the teacher is dealing with mature and in the other case with immature students; in the one case he imparts training primarily by lecture, and in the other by recitation; in the one case attention is centered upon research, in the other upon teaching; in the one case he is addressing presumably free spirits and must therefore have the most unbounded liberty of expression, in the other he is molding opinion rather than inviting reflection and must therefore be far more circumspect. Clearly, it cannot be assumed that the methods and principles applicable to the one function can be applied without modification to the other.

If, however, the history of European universities, as sketched above, is to afford us any indication of the future, it is probable that in the United States, also, this duality will disappear in the course of time. Through this reorganization of our higher educational system, a continually larger part of the present undergraduate course or college will probably be relegated to the secondary schools or to separate institutions like junior

colleges, and the student will enter upon his distinctly university work at an earlier age than that at which he now begins his "graduate," or professional, course. When that stage is reached. there will be as little danger of confusing the university with the college as there is of confusing the latter with the high school. At present, however, the two kinds of work are, in all but a very few advanced institutions, so inseparably intertwined on the administrative side, in financial support, and even in the persons of those who carry them on, that it would be out of the question to attempt to establish separate organizations of college and university teachers as if they already composed two distinct groups. So far as the distinction can now be made, it is usually a distinction not of kind but of degree; and our interests, and for the most part our duties and responsibilities, we share in common. It is to these common interests and duties that I now wish to address myself, while at the same time calling attention at certain points to the difficulties which arise from the duality of function, to which attention has been directed.

2. University Rights.

Common interests may be approached from two distinct points of view. When the United States became a nation, the recognition of the common interests assumed the form of a statement of the rights and privileges which the people ought to enjoy in common. In the same way, in the French Revolution, the Constituante followed the Declaration of Independence by emphasizing the natural rights of the citizen. It was not until half a century later that Mazzini introduced into the field of common interests of the new democracy the conception of duty rather than of right. His great book has done perhaps more than anything else to inculcate in modern society the idea that obligation is a correlative of privilege and that duties no less than rights are to be considered when we think of the warp and woof of common interests.

If, therefore, I take up first our common rights, I wish to be understood as conceiving of these rights not so much in themselves, as opportunities, as rights to perform services through which we may absolve ourselves of our duty. Reserving, then,

a consideration of our common duties until a little later, let us begin with our rights.

There are four fundamental rights which our Association has been attempting to emphasize. These are, in turn, security of tenure, liberty of thought and expression, adequate leisure, and reasonable compensation. In each one of these, however, except the last, there is a difference in degree between the college and the university.

The right to a reasonable compensation may be dismissed with the word, not only because it is a right which we share with all other classes in the community, but also because there has been. in recent years, a gratifying recognition of the fact on the part of the public at large. It goes without saying that in an abnormal situation, like that through which we have just been passing. the burden of an abrupt change in the general level of prices is always borne by the salaried classes and the recipients of fixed income. For these are always among the last to have their situation adjusted to the new economic equilibrium. only too sadly familiar with the sacrifices that have been imposed upon the educators here and abroad, and with the ofttimes unworthy shifts to which they have been reduced. Not only our educational authorities, however, but the public has begun to realize that if it is desired to retain in the work of higher education the type of man or woman to whose services the students are entitled, vigorous effort must be made to grant a compensation that is suitable to the office. Much still needs to be accomplished, and there is abundant room for a discussion of the principles which ought to govern in the apportionment and gradation of salaries. But whatever may ultimately be recognized as the sound method, it is fairly clear that there ought to be no distinction in this respect between the college and the university instructor. Whatever may be the difference in functions, we cannot admit the legitimacy of a difference in importance: if each is satisfactorily fulfilling his function, there can be no tenable ground for demanding a differentiation in compensation. Reasonable compensation may indeed be interpreted as meaning reasonable from the point of view of the class as a whole or reasonable from the point of view of individual achievement. But whether we accept the principle of a standardized or of a specialized salary which differs from individual to individual, it would be both invidious and unfortunate, in the present stage of American education, to distinguish between collegiate and university salaries.

In the case of security of tenure, however, the situation is possibly a little different. It goes without saying that in a certain sense security of tenure is an indefeasible right of all of us. In the economic world of to-day it is coming more and more to be recognized that perhaps the greatest evil connected with the lot of the workmen is the uncertainty of employment. When each weekly pay envelope may be his last, it is only natural that his interest in the economic process should be limited to the reception of that envelope. But if insecurity of tenure is now recognized by our leading thinkers and foremost captains of industry as the center of the problem of industrial unrest, how much more true is the fact when applied to the guild of teachers. We need security of tenure in order to bring out what is best in us; we need it in order to divert our thoughts from the compensation to the opportunities of our position: we need it in order to give us that peace of mind without which good work is impossible; we need it in order to feel assured that we shall not be exposed to the gusts of caprice and the shifting winds of institutional fortunes; we need it. in short, in order to be really ourselves and not a mere counterfeit or presentment of our better selves.

While this is true of all of us, there are certain differences. In the case of a teacher engaged primarily in directing the work of advanced students and chosen chiefly for his powers of research and his ability to make fresh contributions to knowledge, it is necessary to go to the extreme length in the matter of security of tenure. In a true university the fact that the professor may deteriorate in his constructive powers, or may no longer be able to attract the students who have hitherto thronged to his lectures, cannot be permitted in the least to endanger his position. The time to exercise this scrutiny is at the period of his appointment: if he runs the gauntlet then, it is quite

¹ Of in general the Report on Academic Freedom, prepared by the committee of which the present writer was chairman, published by the Association in 1915, and since republished.

sufficient; for any other course would react disastrously upon the welfare of the group as a whole. It is for this reason that in the universities abroad we find acceptance of the principle: "Once a professor, always a professor." He may stop his research, he may cease his lectures, he may even go so far as to give offense to this or that class: he is still virtually irremovable. The risk in the case of the individual professor is accepted for the sake of the dignity and the standing of the profession as a whole.

It is manifestly difficult, however, to apply the same principle to a teacher whose chief or exclusive employment is the instruction of more or less immature students, especially in the earlier vears of our present college course. One engaged in such employment must at any rate be able to teach; and if, for lack of the qualities necessary in that function or for any other reason, he is now incompetent to fill the position, it is not always easy to decide as to how far he should continue to be imposed upon the students. It is not of course a question of illness or of a failure, through no fault of the individual, to go on acceptably with his work; for the ordinary dictates of humanity, of kindliness, and of the duty of colleagues to each other may be expected to take care of such cases. The real problem arises where the efficiency of institution as a whole is impaired. and where the students would be better off with a severance of the relations. An absolute security of tenure would in such a case really be detrimental to progress.

What we have a right to demand, however, is that even in such cases, whether of moral obliquity or extreme inefficiency, the individual should be protected against injustice, whim, or arbitrariness; that due notice of the proposed action be given; that a properly constituted tribunal of his peers be erected; that he have a right to be heard in his defense; and that the utmost measure of consideration be shown if a severance of the relations ultimately becomes necessary. Even where there is no inviolability of position, the individual must be protected in the demand for a reasonable security of tenure.

Much the same argument applies to the right of liberty of thought and expression. It goes without saying that in an institution which is devoted primarily to widening the horizon of

mankind and of broadening the field of knowledge anything which interferes in even the slightest degree with the liberty of thought and expression is quite inadmissible. We are still so densely ignorant, we are still groping so blindly for the light to illumine the world of thought and action, that even the slightest impediment put upon the freest exercise of our intelligence would be fatal. It would be just as absurd to remove from the laboratory of the chemist or physicist certain vials and instruments which are marked "forbidden" as it would be to put athwart the path of the philosopher obstacles to the fullest fruition of his independent thought. In a world where no one believes what his father has believed, where well-nigh everything is in a state of flux, where political and especially economic institutions are perpetually subject to change, how fatal to human progress would it be if the slightest brake were put on the effort of the human mind to convert the unknown into the known!

But should the teacher of elementary subjects in the opening years of the college enjoy quite the same measure of freedom in his methods and utterances in the classroom? Instead of mature students who are eager to hear the last word of striving in human thought and who have the capacity to subject the utterances of the professor to the close criticism of the trained mind, we may be dealing with a group of callow youths whose only interest it is to get a point of view or to receive a nugget of reputed wisdom. Has not, for instance, the teacher of elementary economics to a class of beginners a different responsibility from the leader of an advanced seminar? Does he not owe a certain respect to the feelings, aye, even to the prejudices, of his entourage? Has he the same right to be cynical or destructive? Must he not observe a certain moderation, at least in expression?

Not a few of the cases of alleged infraction of the liberty of thought which have been presented to our committee on academic freedom have been on this border line of what is or is not allowable. Do we strengthen the legitimacy of the general principle by applying it to doubtful cases? It is, of course, never permissible to subject to a censorship the opinions of even the elementary school teacher who does not by his teaching or his

personality exert an unfortunate influence on his pupils. It is sadly true that in a time like the present, where mankind is being swayed more by emotions than by intellect, and where we, especially in America, have been swept by the passions of war from so many of our ancient moorings, even this principle has not infrequently been violated. It is moreover indispensable that any limitations or regulations designed to affect even the elementary college instructor should be framed, not by the administrative authorities, but by his own associates in the department or by his academic colleagues in the country at large. The point that I am seeking to emphasize, however, is that we must not exaggerate, and that if we apply the principle of absolute liberty of thought and expression to cases where it is only in part relevant, we jeopardize the maintenance of the principle itself.

The fourth point is the right of leisure. By leisure, of course we do not mean the leisure to idle—although it is quite true that all work and no play is apt to make the professorial Jack a very dull boy. What we have in mind is the leisure necessary to enable us to put forth our best efforts and to achieve real self-expression. There is a threefold aspect of this right to leisure:—freedom from excessive hours in the classroom or in the academic lecture hall; freedom from undue participation in faculty committees and in ordinary administrative work; and the freedom from continuous labour, which takes the form of the sabbatical year, with its opportunity for spiritual refreshment and the chance of accomplishing some extra-curricular task.

In all these respects there is, indeed, a difference. But the difference is one of such slight degree that it can safely be neglected. For while the scholar who devotes himself primarily to research naturally needs more leisure in which to make his preparations and to carry on his work, it is undoubtedly true that the college instructor must also be protected from the eternal grind of excessive recitation periods and undue participation in administrative work. Our best teachers are those who seek to keep pace with the progress of their particular discipline and who retain their enthusiasm by undertaking some constructive work in the science itself. All of us, university professors and

college teachers, are almost equally interested in the maintenance of this freedom from immoderate work.

This matter is perhaps the most important of all at present confronting our Association. How frequent has been our experience in turning out brilliant graduates who acquitted themselves admirably in the laboratory or the seminar and from whom we had every right to expect a continuance of the career so auspiciously begun,—how frequently have our expectations been disappointed by the fact that this promising graduate has accepted a college position the fancied exigencies of which have compelled him to devote from twelve to twenty hours a week in the deadly grind of elementary classroom recitation, and who has, in addition, often been drafted to serve on endless committees or to aid the administration. During the very years most propitious for new ideas, for constructive effort, and for sustained enthusiasm, the lack of a decent amount of leisure saps the enthusiasm and circumscribes the ambition, until the mettlesome steed becomes the steady but dull dray horse. There is perhaps nothing in our entire system so responsible for the paucity of really distinguished scholars to be found with us, and for the fact that, notwithstanding our wealth, our numbers, and the quantity of our output, the quality of the scientific work thus far accomplished by American scholars has as yet failed to put us, with a few notable exceptions, in the same class with our foreign colleagues. It is not the youth of this country, as it often is alleged; it is not our predisposition to material pursuits; it is not any native lack of ability in our scholars: it is, in my judgment, almost entirely the result of the inchoate organization of our higher institutions of learning and of the mistaken conceptions of our governing bodies as to what really constitutes a university. In the field of economic life it has only recently been recognized that a shorter working-day for the labourer leads to greater output and to more wealth for the community, including the employer, as well as to more welfare on the part of the laborer. How long will it be before we apply the conclusions of the economic life to the facts of intellectual life? How long must we wait before the fallacy of the alleged economy of long hours in the institutions of learning is acknowledged, and the advantages of a reasonable amount of leisure are recognized as conducing not only to the efficiency of the instructor, but to the best interests of the institution and of the community which it serves?

3. University Duties.

Let us turn now from a consideration of our rights to a discussion of our duties. It is here not only that we are more conscious of our common interests, but that it is important for us to emphasize the true aspirations of our Association. If we are different from a trade union,—if we are really desirous of maintaining high standards and insuring the progress in the academic life of which we form a part,—we shall be drawn more closely together by an appreciation of our opportunities rather than of our privileges, of our duties rather than of our rights.

Our duties, as I see them, are of a fourfold character,—duties to the institution, duties to the students, duties to the community and duties to science. A word as to each of these.

It goes without saying that we owe a wholehearted loyalty to the institution with which we may happen to be connected. It is one of the elementary obligations which scarcely need to be emphasized, that we must to the best of our ability aid the authorities in carrying on, and in helping to make the work not only of our department but of the institution as a whole more efficient. But loyalty to our institution is like patriotism in politics. We may not indeed agree in believing with Dr. Johnson that an appeal to patriotism is the last refuge of the scoundrel, but we can certainly not refuse to recognize the growth of the new internationalism. While the world constitution of the future will no doubt be based on the continued existence of a vigorous and progressive nationalism, it is none the less true that our loyalty to the higher ideal will necessitate the exercise of a discriminating patriotism at home which will not hesitate to criticise when helpful and constructive criticism is needed. So, in the same way, loyalty to our own college and university is not incompatible with loyalty to the higher idea for which the institution stands. We want, indeed, and must demand, active cooperation with the President and the Trustees, but we do not need and cannot brook the undiscriminating acceptance of every plank in the institutional platform. The higher loyalty to our institution must be so interpreted as to render possible an independent weighing of the arguments for some special policy, and to evoke our best efforts in aiding or retarding, as the case may be, some particular movement. "My country, right or wrong" has no application in the academic sphere. In the present welter of institutional life it is sometimes difficult to distinguish the right path; and he would indeed be venturesome who would hazard the affirmation that his particular institution is in all respects headed in the right direction. Loyalty to our institution is entirely compatible with the courage of criticism and the intrepidity of constructive suggestion.

Our second duty is to our students. This duty we are sometimes inclined to take too lightly. The situation is now far different from that found in the mediæval universities where the professors were engaged by, and subject to the control of, the students. How interesting would it be to-day if, as in Bologna, the professors in signing their contracts for a certain remuneration agreed with the students to cover a definite part of the subject within a fixed period, so that if a certain punctum was not reached by a given date, the lecturer would expose himself to all the rigours of the penalty, pecuniary or otherwise. To-day it is the professor, and not the student, who is on top. But with power there comes responsibility. I have often wondered whether we are all fully conscious of our present responsibilities. I do not speak of the elementary duties which we owe to our students, whether in the recitation room or the lecture hall.—the duties of courtesy, of impartiality, of imperturbability, of openmindedness, and of patience. These go without saying. But are we always entirely alive to our larger responsibilities, the responsibilities of adequate preparation which connotes far more than keeping one lesson ahead of the student or than rehashing from year to year the ideas which at one time were invested with a certain freshness? Duty to our students involves the larger duties to ourselves, the duty to insist at all hazards upon our own intellectual growth, and upon the constant broadening of our human sympathies. It is so easy to recline complacently in our chair, so simple to cut our coat according to the cloth, so convenient to rest on our oars. A proper interpretation of our duty to our students implies a perpetual enthusiasm, a continual reaching out into new fields, a divine discontent with our achievements.

The third duty is that to the community, of which our institution forms a part. Entirely mistaken are those who believe that the academic teacher must be a cloistered recluse, aloof from the struggles of the marketplace or the contests of the political arena. No matter what the particular branch of the science may be to which the academic professor is devoted, he cannot disassociate himself from his fellowmen. because he stands for intellectual achievements his opinion will be sought by his fellowmen. With the growing mastery of science over nature and with the increasing application of science to every phase of human life, the community is daily brought into closer contact with the academician. How indefensible. then, would be the position that we are under no obligations to help when our aid is demanded. It is not simply of the social and political interests of the community, important though these are, that I am speaking. I refer to the manifold activities of an intelligent and democratic community, which run through the whole gamut of present-day life and touch at numberless points the interests of every thinking man. We have no right to wrap ourselves in the mantle of superiority or self-righteous-As members of a great democracy we must ever hold ourselves ready to participate in, and to lend support to, every collective movement in which our counsel can be of avail. But with this obligation goes the duty to keep our skirts clear of all unworthy imputation; to be sure that if we receive a retainer for our advice our judgment is not influenced by the emolument; to be conscious that when we speak or act we are doing so not simply as individuals but inevitably in our representative capacity; that we cannot divorce ourselves from the institution with which we are connected; that not only our good name but its reputation is at stake; and that what we need at all times is sobriety of judgment, common sense in attitude, and moderation in statement.

We come finally to the most important of all our obligations,

namely, our duty to science. This means our duty to liberty and truth. For without complete liberty of the intellect and without absolute devotion to truth there can be no pretense of scientific achievement. To this all our other activities must be subordinated; in this the very existence of the university finds its meaning. When our other duties come into conflict with this supreme obligation, they must give way. Loyalty to our institution is admirable, but if our institution for some unfortunate reason stands athwart the progress of science, or even haltingly follows that path, we must use our best efforts to convince our colleagues and the authorities of the error of their ways. Our duty to the students is unquestioned; but so far as the mature student is concerned, his chief concern is to be initiated into the details of scientific method, while even the younger students who are interested only in general information have a keen appreciation of the difference between the scientific and the non-scientific attitude. So that the more closely we hew to the line of devotion to science the more successful shall we be in satisfying all our students. Finally, it is obvious that our communal obligations can be best discharged by being continually mindful of our position as real acolytes of science. The degree of the appreciation that may be bestowed on us and the measure of good repute in which we may be held by the community stand in close relation to our success in pursuing steadfastly the narrow and rugged path of strict devotion to truth. Let us not forget that in prosecuting this end we need both individual and collective effort. The leisure of the laboratory and the study count for much, but almost equally important is the stimulus derived from contact with our colleagues. And while such contact may assume the form of the narrower fraternity connected with our own specialty, we also need the stimulus of that wider group represented in this Associationthe stimulus derived from the knowledge of a comprehensive and unalloyed devotion to the supreme end of our life's work.

4. Conclusion.

This combination of rights and duties thus constitutes the real meaning of our existence. When we contemplate the situation in

this broader way we recognize the cause of what may, I fancy, be declared the chief difficulty which we have thus far encountered. With the emphasis that we have hitherto bestowed on our rights and privileges it is but natural that we should have been concerned rather with criticism of others and with protection of self. In every great movement it is always incumbent to remove obstacles, and to tear down before we are ready to build up. The chaotic and uneven development of higher education during the last generation engendered certain abuses which called for reform, and certain practices which needed to be swept away. The result was the growth of a feeling of opposition between the trustees and the president on the one hand, and the faculty on the other; or, to put it more broadly, between the administrative and the educational branches of the university. It was in deference to this feeling that membership in our group was refused to those whose duties were entirely or in major part administrative in character.

We are now, in my judgment, ready for a new phase of development. The critical era needs to be supplanted by the constructive. We need cooperation rather than suspicion. we have duties as well as rights, we should welcome the aid of the administrators in helping us to define our duties; and we should hope that in this way we should be much more likely to secure their cooperation in recognizing our rights. Notable progress has already been made in many of our institutions in securing this cooperation, and in not a few of the institutions where slower progress has been made, the fault is to be ascribed not simply to the administrators, but also to ourselves, who through selfishness, lethargy or cynicism have neglected to assume our full share of the burden. We can afford, however, to be optimistic about the outlook, for the situation is automatically remedying itself. At the beginning there was a sharp division between administrative and educational functions. With every year, however, the presidents and the deans are being recruited from the ranks of our active members, sharing our aspirations and comprehending our problems. These former members retain an honorary membership which entitles them to what is after all our chief opportunity, that of free and frank discussion. In one form or another, therefore, we may look forward in the not distant future either to a virtual inclusion of most of the administrative authorities in our membership or at least to a situation where we can count upon the sympathetic coöperation of those who at one time were active in our own management and deliberation. This more than all else may be put in the forefront of our list of aspirations. Mutual understanding, goodwill and whole-hearted cooperation will do more to bring us together and to solve our outstanding problems than dozens of independent reports and reams of separate discussions, important as these have been in our past history. We can with advantage substantially increase and extend the coöperative relations already developed through our membership in the American Council on Education, with such bodies as the Association of American Universities, the Association of American Colleges, etc. We are strong enough to have our influence count: we are big enough to be ready to pull together with others in the endeavor to achieve our common ends.

And, finally, a word as to our accomplishments. It is neither modest nor becoming to sound one's own praises; but at a time like this it is perhaps not inopportune to make ourselves realize what has actually been done. This is still far from being adequately appreciated. Most of our work, as is well known, has been accomplished through the medium of committees. I were to classify our committees into groups it would be somewhat as follows: First are those which emphasize our rights, like Committee A, on academic freedom and Committee T, on the place and functions of the faculty. Next is the group which accentuates what might be termed our opportunities, such as Committee R, on the encouragement of university research; Committee V, on the apparatus for productive scholarship; and Committee W, on the status of women. Then comes the group which emphasizes our duties—that is, Committee I, on university ethics, and Committee Y, on guiding principles. The fourth group is that affecting the conditions of work: Committee B. on methods of appointment and promotion; Committee K, on the sabbatical year; Committee P, on pensions and insurance; and Committee Z, on the economic condition of the profession. Our relations to the students are dealt with in the fifth group: Committee C, on scholarships and fellowships; Committee E,

on student assistants; Committee G, on methods of increasing intellectual interests; and Committee H, on increased migration and interchange of students. Finally comes the miscellaneous group, including Committee D, on vocational education, and Committee L, on coöperation with Latin-America.

If we take stock of our accomplishments I should say that the first group has thus far done its work well. We have elaborated a fairly definite code of principles covering the real content of academic freedom, and we have made some progress in working out the rules which should govern in the matter of academic tenure. Much still remains to be done, but notable results have already been attained. The committee on honorary degrees has rendered a report which may be regarded almost as complete in itself and which needs only to be supplemented as occasion may require. Much the same may be said of the committee on the requirements for the Ph.D. degree and the committee on summer schools. Other committees have made at least important beginnings. This is true of the committee on place and functions of the faculties, although that work needs to be supplemented with a periodic statement of progress from year to year. An admirable start has also been made in the report of the committee on graduate students and the committee on the status of women.

By other committees, like that on pensions and insurance, faithful and painstaking work has been done, and if entirely satisfactory results have not yet been achieved, the reason is to be found rather in the situation itself. In the remaining fields the progress thus far has been comparatively slight, largely because of the fact that our efforts have been centered on other objectives. Some of these committees, however, notably those on the economic condition of the profession, on vocational education, and on methods of increasing the intellectual interests are reporting at this meeting and much may be hoped from them in the immediate future.

When we reflect upon our accomplishments; when we remember that we have grown to be a band of some four thousand, soon to be, as we confidently expect, some five or six thousand; when we recollect that we are only at the beginning of our efforts, —we may well feel proud of what has been accomplished. But

more important than the past is the future. If we remain conscious of our high purpose; if we resolve to cherish our common standards; if we realize that nothing is worth achieving which is not worth battling for; if we determine, while unflinchingly maintaining our rights, to become increasingly mindful of our obligations; if we emphasize our points of agreement rather than the lines of divergence; if we seek by example rather than by precept to instill into others that regard and appreciation which we desire; if we hold on high the torch of our aspirations,—we may illumine the broad path of academic progress, and may contribute our share to the steady advance of the light and learning which will some day redeem the world.

Abominations, bill of, 144. Academic freedom, 374. Ackerman, cited, 196n. Adams, Brooks, 297. Adams, C. F., 212n.
Adams, C. K., 149.
Adams, H. C., quoted, 150, 312;
cited, 221n.
Adams, T. S., 156. Advisory boards, 191. Alexander, cited, 196n., 211n. American Association of University Professors, the, 36; the college and the university, 364-371; university rights, 372-378; university duties, 379-38; conclusion, 38. American economic association. founding of the, 149. Americanism, hundred per cent, 287. Amos, S., cited, 53n.; quoted, 339. Anarchists, the American, 144. Anderson, B. M., Jr., mentioned. 157. Anderson, J., cited, 110n. Andrews, J., mentioned, 153. Anti-corn-law league, the, 22. Aristotle, 2. Arkwright, 10, 23. Ashley, Lord, 44. Ashley's committee on railways, 247. Associationism, 143. Atkinson, E., 144. Aucoc, cited, 215n., 249n. Audiganne, cited, 252n.

Associationism, 143.
Atkinson, E., 144.
Aucoc, cited, 215n., 249n.
Audiganne, cited, 252n.

Bachelor's degree in the mediæval universities, 368.
Bagehot, W., 16.
Bailey, S., quoted, 83-86.
Baird, H. C., quoted, 142.
Baldwin, L., 134.
Baldwin, W. H., 339.
Ball, J., 22.
Ballou, A., 144.
Banking controversy in the United States before the Civil War, literature of the, 145.
Banks, H., 136.
Banks of Exchange, Equitable, 29.

Barton, W., 128. Bascom, J., 141. Baum, cited, 186n. Beck, E. M., 148. Bellers, J., 26n Benezet, A., 125. Bentham, J., 5, 30. Bidwell, B., 133. Bigelow, E. B., 144. Bishop, H., 133. Blanc, L., 165. Blanchard, 196n., 228n. Blodgett, J. S., 135. Blum, S., 157. Bodin, 6. Böhm-Bawerk, 84. Bogart, E. L., 157. Boinvilliers, cited, 198n. Bollman, 136. Bontoux, cited, 242n. Bordley, J. B., 133. Bowdoin, J., 131. Bowen, F., 140. Brentano, L., cited, 32n.; quoted, Brewer, cited, 53n. Brière, cited, 186n. Bright, 36. Brindley, 10. Brioschi, cited, 186n. Brisbane, A., 144. Brissenden, B. F., 157. Bristed, J., 136. Brodribb, cited, 53n. Brothers, 143. Brown, 225. Brown, H. G., 157. Brown, W., 145. Bullock, C. J., 156. Butt, I., cited, 118n. Byllesby, 142.

Cade, J., 22.
Cairnes, J. E., 18.
Callender, J. T., 133.
Calvori, cited, 186n.
Campbell, J., 144.
Canal acts, 19.
Canals, Pennsylvania, 201.

Canard, 316. Cannan, 71, 314. Cantillon, 9. Capital, export of, as a motive for war, 168. Capitalization, 317. Cardozo, I., 138. Cardwell's act, 210n., 252. Cardwell's committee, 247. Carey, H. C., 141. Carey, M., 129, 136-137. Cartwright, 10. Carver, T. N., 154. Cause, S. de, 180. Chadwick, cited, 226n. Chanute, cited, 186n. Champlin, J. T., 141. Charging what the traffic will bear, Charity, expenditures for, 334. Chartists, 20, 30. Chevalier, J., 53. Chickering, J., 283. Child, J., 6. Christian church, the, and economic theory, 4. Christian socialists, the, 31-55; the founders, 31-34; the name, 35; the beginnings, 38-40; the associates, 41-43; socialism and cooperation, 44-49; the theory, 50-52; the later history, 54-55. Clark, A., letter to, on immigration, Clark, J. B., 93, 115, 151, 152. Clark, J. M., cited, 222n., quoted, 157, 265. Classification of railway rates, 188-192. Cloud, cited, 256n. Cobbett, 67. Cobden, 14. Cohn, G., cited, 205n., 248n. Colbert, 6. Colden, C., 27. Col, H., 123. College, the, 366. Collins, J., 144. Colman, J., 123. Colton, C., 140. Colwell, S., 142. Columella, cited, 4. Combinations, railway, 225. Commencement, mediæval college, 366. Commerce, schools of, 158. Commissions, railway, 252-255. Committee of Fifteen, 340.

144. Communist, 28. Commutation of tonnage act, 213. Comparative cost, 74. Competition and cooperation, 45. Competition in railways, 219-226; 242-250. Compulsory railway commissions, 258. Comte, quoted, 1. Conant, C. A., quoted, 147. Consiglio per l'esame delle tariffe ferroviarie, 192. Continuity of economic thought: earlier views, 2-6; eighteenth century, 7-10; the classical school, 11-14; the reaction, 15-19. Cooley, T. R., quoted, 186; cited, 228n. Cooper, T., cited, 31n., 48n. Cooper, T. (American), 137. Cooper, T. R., 124. Cooper, W., 40. Cooperation and Owen, 37. Coöperative league, 53. Cost, comparative, 74. Cost of service, 184-186. Corvées, 8. Costs, joint. See Joint costs. Cotterill, 86-88. Cotton spinneries, 23. Covington, 39. Coxe, T., 128. Craig, quoted, 77-81. Crisis of 1907, the, 266. Croker, J. W., cited, 49n. Crompton, 10. Cromwell, 11. Cross, I., 157. Cullom committee report, 182n., 183n., 186., 194n., 195n., 200n., 213n., 214.; quoted, 226n., 203, 250. Cunningham, 16. Cunningham, L., 129. Currency discussion in the American colonies, the, 123. Dalhousie railroad commission, the, 252. Dallas, N. J., 176. Darby, W., 136. Davenport, H. J., 154. Dealtry, 145. Deane, S., 133.

Commons, J. R., 155.

Communist movement in America,

Communionists, 28.

De Bow, 145. Delmar, A., 147. Demolins, 287. Dentist, economic problems of the modern. See Economic problems. De Quincey, 83. Devonshire railway commission, the. 247. Dew, T. R., 144. Dewey, D. R., 155. Dickinson, J., 126. Dickinson, R., 136. Diffusion theory, the, 69. Dignan, 44. Disappearance of taxation, the, 320. Discriminations, railway, 192-213. Districting the field, 226. Douglas, P., 157, 334. Douglass, W., 123. Droit au travail, 25. Dühring, quoted, 142. Dulaney, D., 126. Dunbar, C. F., cited, 122n.; quoted, 146. Duncombe, C., 147. Dupont, 88. Dwight, T., 136.

Economic interpretation of the war, 162-179; nationality and economics, 162-169; stages in rivalry, 170-174; the probable future, 175-179. Economic problems of the modern dentists, the, 325-338: Earnings, 325-330; spendings, 331-334; savings, 335-338. Economics and social progress, 289-303; an according interpretation

Economics and social progress, 289-303; an economic interpretation of progress, 289-294; the lessons of economic interpretation, 295-303.

Economics in the United States, 122-160. The colonial period, 122-126; the close of the eighteenth century, 127-133; the nineteenth century to the Civil War, 134-144; the postbellum decade, 45-147; the modern schools, 148-160.

Economistes, 8. Eighteenth-century theory in economic literature, 7. Elder, W., 142. Eliot I 195

Elder, W., 142. Eliot, J., 125. Ellett, C., Jr., 139. Elliott, E., 41. Ely, R. T., 152. Endemann, cited, 234n. Engel, F., cited, 31n. Engländer, cited, 38n. Evans, 143. Evelyn, 138. Everett, A. H., 135. Export of capital, 168.

Factory laws of 1819, the, 26. Factory system, the, 11. Faculties of the mediæval universities, 359. Fairbairn, E., cited, 186n. Farrer, quoted, 225n. Faucher, J., cited, 31n. Fawcett, H., 16. Felt, J. B., 145. Ferrara, 143. Ferris, J. A., 145. Fetter, F. A., 154. Fielden, J., 75. Fifteen, the committee of, 340. Finance, public, 312.
Finance, public, 312.
Findley, W., 133.
Fink, A., cited, 182n., 186n., 196n., 228n., 231n.
Fisher, I., 155.
Fitch, T., 126. Fixed prices, system of, 329. Fortescue's railway committee, 247. Fourier, 30. Fourierism, 143. Foville, de, 201n. Francis, T., 124. Franklin, B., quoted, 117, views on immigration, 281. Franqueville, de, 250. Frederick the Great, 6. Freedom and the university, 354-356. French, 39. French revolution, the. See Revolution. Frye, R., 123. Furber, 196n. Furber, H. F., 122n. Furniss, E. S., 157. Furnivall and the Christian socialists, 41.

Gale, B., 129.
Gale, S., cited, 83n.; quoted, 128.
Gallatin, 131.
Galt, cited, 233n.
Garke, 186n.
Gay, E. F., 156.
Genala, 186n.
George, H., 147, 297.
Germany and the war, 172.
German local railway councils, 191.

Giddings, F. H., cited, 222n.; mentioned, 148, 158. Giulani, G., cited, 28n. Gladstone, W. E., cited, 233n.; mentioned, 252, 330. Gladstone's committee, 247. Goderich, Lord, and the Christian socialists, 41. Godwin, 134, 144. Gordon, cited, 186n. Gossen, H., 88. Goschen, 18. Gouge, W. M., 144. Gournay, 8. Gournerie, cited, 202n. Granger movement, the, 200, 213, 255 et seq. Grant-Duff, cited, 53n. Gray, S., cited, 66n. Great Britain and the war, 172. Greek economic life and theory. 3. Greeley, H., 144. Greene, W. B., 145. Greg, cited, 49n. Gregg and Pond, cited, 190n. Greenleaf, 136. Gresham's law, 5. Grierson, cited, 149n., 202n. Groat, G. G., 157. Grosvenor, W. M., 144.

Hadley, A. T., 153; criticised, 192n.; corrected, 223n. Haig, R. M., 157. Haines, cited, 195n.; quoted, 182. Hale, E. E., cited, 284n. Hales, quoted, 6. Hamilton, A., 130. Haney, L. H., 158. Hanson, G. A. C., 129. Hare, Archdeacon, 39. Hargreaves, 10. Harper, R. G., 132. Harriman, cited, 231n. Harrison, F., cited, 53n. Haywood, E. H., 145. Held, A., 16. Helps, 39. Hepburn committee report, 231n. Herbert, S., 44. Herrmann, 18. Higgs, H., 65. Hildebrand, 15. Hildreth, R., 145. Historical school, the, 15. Hobbies, value of, 330. Hollander, J. H., cited, 75n., 122n.; 'quoted, 155.

Holyoake, J. H., 60.
Homologation, 192.
Horner, J. M., 144.
Horton, S. D., 147.
Hoxie, 157.
Huber, cited, 32n., 52n.
Hubert-Valleroux, cited, 38n.
Hudson, W., criticized, 228n., 230n., 238n., 239n., 245n., 248n.
Hughes, H., 144.
Hughes, T., cited, 36n.; quoted, 41, 54.
Hume, D., 9.
Humphrey, J., 135.
Hürlimann, cited, 216n.
Hutchinson, T., 123, 124.
Huxley and the Christian socialists, 53n.

Illinois railroad law, 200.
Immigration problem, the, 280-288;
Immigration in the past, 280-283;
the arguments pro and contra, 284-288.
Impersonal taxes, 319.
Ingersoll, J., 126.
Ingram, J. H., 16.

Institute of economics, the, 160.
Institute for land economics, the, 160.
International exchange, theory of, 18.

Internationalism and progress, 292. Interstate commerce law, railway tariffs and the. See Railway tariffs.

Jacqmin, cited, 201n., 217n., 236n.
James, E. J., 150.
James, W., 359.
Janzhul, cited, 22n.
Jarvis, E., 145.
Jay's treaty, 132.
Jeans, cited, 242n.
Jefferson, T., 130; on immigration, 281.
Jennison, 39.
Jenks, J. W., 156.
Jerome, 330.
Jevons, S., 14.
Jogue, Father, 280.
Joint costs, theory of, 216.
Joint executive committee, quoted, 191n.
Joint-purse arrangements, 233.
Jones, E., 158.
Jones, 15.

Junior colleges, 371.

Justinian, code of, 3. Justum pretium, 5.

Kellogg, E., 144.
Kemmerer, E. W., 156.
Kennington common, 38.
Kett, R., 22.
Kimball, cited, 196n.
King, W. I., 157.
Kingsley, C., 33-35.
Kinley, D., 155.
Kirkman, cited, 186n.
Kleinwächter, cited, 122n.
Knies, 15.
Knight, F. O., 158.
Know-nothings, the, 283.
Knox, J. J., 147.
Krönig, 216.
Ku-Klux Klan, 284.
Kupka, cited, 250n.

Labour banks, 29. Labour movement in the United States, the, 143-144. Labour movement, Owen and the, 29-30. Laissez-faire system, the, 16. Lalor's cyclopedia, cited, 220n. Lamennais, 43. Lardner, cited, 186n. Lauderdale, 65, 78. Laughan, Dr., 132. Laughlin, J. L., 153. Lawrence, 139. Lawton, E., 141. League of Nations, 178n. Leroux, P., cited, 28n. Leslie, 16. Levine, L., 157. Liberty and the university, 354-357. Licentiate, the mediæval, 366. Lees, 46. Lingley, A., 145. List, P., 15, 134. Lloyd, H., cited, 83n. Lloyd, W. F., 87-95. Local discriminations, 197-214. Locke, J., 69. Logan, G., 133, 135. Loisel, cited, 181n. Longe, 18. Lord, E., 144. Lowe, 138. Longfield, M., 111-117. Ludlow, J. M., and the Christian socialists, 33, 39, 51, 55. Lushingtons, the, 53. Luther, S., 143.

Lutz, H. L., 147. Luxury, the fallacy of, 332. Mably, 30. McCulloch, J. R., 14, 36, 312; accused of plagiarism, 100. McFarland, R., 144. McVickar, J., 137. Maclure, W., 143. Malthus, 12, 71; on rent, 81; American reprint, 134. Mangoldt, 85. Manchester school, the, 20, 36. Mansfield, cited, 41n. Marcet, Mrs., republished, 134. Marginal Utility, the theorists of, 90. Marlo, 15. Marshall, A., 16, 109. Marx, K., 29, 101, 297. Masquerier, L., 145. Massey, G., 48. Mathers, cited, 28n. Maurice, F. D., 31-36. Mayhew, 42. Mayo-Smith, 151. Mediterranean races, the, and immigration, 286. Meek, cited, 196n. Mexico and Owen, 27. Michaelis, cited, 198n. Michigan railroad law, 200. Mill, James, 14, 68. Mill, John St., cited, 28n., 51n.; quoted, 220. Millbank, cited, 40n. Mills, F. M., 157. Minnesota railroad law, 200. Mitchell, W. C., 156. Montchrétien, 7. Moon, E., 143. Moore, H. L., 155. Monopoly, railway, 219-226. Railway tariffs. See Moore, H. L., Moore, T., 135. Morehouse, cited, 186n. Morelly, 30. Morgan, J., 125. Morris, J., 133. Morrison, J., 252. Morse, J., 125. Mosler, cited, 250n. Motherwood, 27. Munroe, H., cited, 53n. National board of economic research, 160. Nationality and economics, 112.

Nationality and progress, 292.
Neale, V., quoted, 44, 53:
Neglected British economists, some, 65: earlier writers, 65-69; contemporaries of Ricardo, 70-80; the value theorists, 81-94; the critics, 95-110; the marginalists, 111.
Neo-mercantilism, 167.
Neumann, F. J., 139.
New Haarlem, 281.
New Harmony, 27.
New Lanark, 23.
Newcomb, S., 141.
Nicolai, cited, 217n.
Nordling, cited, 189n, 216n, 250n.
North, 6.
Northern securities decision, 239.

O'Connor, 38.
Ogburn, W. F., 158.
Ohi, J., 126.
Ohio railroad law, 214.
Opdyke, 140.
Orbiston, 27.
Oresme, 5.
Osborn, 39.
Owen and the Christian socialists, 20-63: Owen in New Lanark, 23; second period, 24-27; theory of labour, 29; dotage, 30.
Owen, R. D., 43.
Oxford movement, the, 32.

Pacifism, 177. Page committee, the, 341. Page law, the, 341. Pare, W., cited, 28n. Paris, revolution of 1848 in, 38. Parson Lot, 40. Patristic authors, 4. Patten, S. N., 150. Pearson, cited, 53n. Pellarin, cited, 28n. People's college, the, 53n. Perrot, cited, 248n. Perry, A. L., 141. Persons, W., 157. Personal discriminations, 193-196. Personal taxes, 319. Petty, W., 6, 69. Phaleas, 297. Phillips, W., 138. Philœunomos, 124. Physiocrats, the, 8; in England, 65. Picard, cited, 215n., 236n., 249n. Pickering, J., 144. Pigou, A. C., 265. Plehn, C. C., 156.

Politics for the people, 39.
Pollak foundation, the, 160.
Pools, railway, 227-241.
Poor's manual, cited, 180, 189n.
Pope, 233.
Potter, A., 140.
Potter law, the, 200.
Poussin, N. T., 190.
President of the United States, 360.
Pretium, Justum, 5.
Price, quoted, 227n.
Prince, J. C., 48.
Pro-rata laws, 214.
Prostitution. See The social evil.
Proudhon, 15, 29.

Quesnay, 8.

Rae, J., quoted, 140.

Raguet, C., 144. Railway tariffs and the interstate commerce law, 180-261: General considerations, 180-191; discriminations, 192-206; short-haul principle, 207-218; competition and monopoly, 219-226; pools, 226-241; other forms of competition, 242-250; the interstate commerce commission, 251-258; conclusion, 259. Railway tariffs, theory of: fixed charges and operating expenses, 182-3; cost of service, 184; charging what the traffic will bear, 187; joint costs, 216. Railway tariffs abroad: Austria, 235; Belgium, 235; France, 186, 215, 236, 244; Germany, 186, 216, 234, 243; Great Britain, 186, 217, 243, 252; Holland, 236; Italy, 186, 236; Switzerland, 236. Railways, select committee on, 190, 193, 199, 200, 210, 216, 217, 222, 223, 225, 227. Ramsay, G., 106. Rashdall, cited, 366n. Ravenstone, P., 98. Raymond, D., 134. Read, S., 100-106. Regulation, sanitary, 344. Reizenstein, cited, 234n., 248n. Relativity of economic doctrine, 16. Revolution, French, 30; of 1848, 38. Reybaud, cited, 28n. Ricardo, 12, 142; and Torrens, 71; and Craig, 80; and Read, 103; and Ramsay, 108; reprinted, 134; Hollander on, 156. Ricardian socialists, 97.

Ripley, W. Z., 156.
Roberts, 135.
Rochdale pioneers, the, 47.
Rodbertus, 29.
Roman scriptores de re rustica, 4.
Roman law, 8.
Rooke, J., 95.
Roscher, W., 15.
Rosetti, D., cited, 53n.
Ross, E. A., 158.
Ruuning powers, 249.
Ruskin, cited, 322, 53n.
Russell, A., 145.
Rutherford, 133,

St. Luke, 5. St. Simon, 30. Salmasius, 5. Samuelson, cited, 205n., 234n. Sanitary regulation of the social evil, Saratoga meeting of the American Economic Association, 109. Sax, E., cited, 182n., 201n., 247n. Say, cited, 118n.; translation of, 134. Schäffle, 85. Scheffler, cited, 186n. Schöenhof, J., 146. Schmoller, G., 16. Schreiber, cited, 216n. Schübler, cited, 186n. Schuller, cited, 186n. Schuyler, E., 114. Schuyler, P., 132. Schwab, J. C., 153. Scott, W. R., 155. Seager, H., 155. Seaman, E. C., 140. Sedgwick, T., 139. Senior, N. W., 14, 36, 87. Separation of traction and carrier, 246. Serra, 7. Service, cost of, 184. Service, value of, 188. Seymour's bill, Lord, 252. Shattuck, L., 145. Shaw, A., 150. Sherman, S., 124. Sherwood, S., cited, 122n. Shirras, J. F., 69. Shorter, cited, 40n. Short-haul clause, 207.

Simkhovitch, V. G., 156.

Simpson, S., 143. Sismondi, S. de, 15. Skidmore, T., 143. Skinner, J. S., 135. Slavery, influence of, on economic thought, 4. Small, A. W., 158. Smith, A., quoted, 8, 12, 65, 142, 316; American reprint, 134. Social aspects of economic law, 304-323: the social point of view, 304-310; application to public finance 311-321; conclusions, 322-Social evil, the, 342-351: the policy of regulation, 342-345; the Page law in New York, 346-351. Social progress, economics and. See Economics. Socialism, 21; origin of the term, Socialism, Christian. See Christian socialists. Solacroup, cited, 187n. Sollers, A. R., 283. Spence, T., 22, 66. Spooner, L., 144. Spottiswoode, 53. Spurrier, J., 133. Stanley, 39. Statistics, American studies in, 145. Stephens, F. J., cited, 53n. Stephenson, R., cited, 223n. Sterne, S., cited, 228n., 229n. Steuart, 69 Steuart, W. W., quoted, 157. Stevens, Col., 180. Steward, I., 145. Storch, quoted, 106. Students of the mediæval universities, 362. Studium generale, 365. Sullivan, J., 132. Sumner, W. G., 146. Swan, J., 129. Sweatshops in London, 43. Tailors' associations, 45.

Tailors' associations, 45.
Tariff controversies in American literature, 144.
Taussig, F. W., quoted, 152; criticised, 262-264.
Tayler, J., 133, 135.
Taylor, W. G., L., 155.
Taxation, burden of, 315.
Taxpayers and taxbearers, 69.
Tenure, security of, in American universities, 375.
Territorialization in railways, 226.
Thatcher, O., 124, 126.

Thorn, W., 48. Thompson, 15.
Thompson, R. E., 142. Thoviste, cited, 221n. Thurman, 186n. Tolls, railroad, 244. Torrens, W., 70-77. Toynbee, A., 16. Tractarian movement, the, 32. Trustees of American universities, 361. Tucker, G., 139, 145, Turgot, quoted, 4, 5, 8. Turner, J. R., 122. Tuttle, H., 148. Tyler, 225n. Tyler, W., 22. Tyndall and the Christian socialists, 53n.

Ulrich, cited, 186n., 216n., 234n.
Uniformity in taxation, 311.
United States, economics in. See
Economics.
Universities, 365.
University, the real, 352. The spirit
of the university, 352-357; the
form of the university, 358.
University monographs, 159.
Utility, marginal, theorists of, 90.
111.
Utility, social, 307.

Value of service, 201.
Value, marginal, theorists of, 111.
Value, social, 307.
Value theorists, 81.
Vance, H., 123.
Vanderbilt, Com., cited, 196n.
Varlo, C., 130.
Varro, 4.
Veblen, T., 154.
Vethake, H., 139.
Viner, J., 157.

Wagner, A., 16; cited, 186n. Walker, A., 141.

Walker, F., 147. Walras, 88. War, an economic interpretation of the. See Economic interpretation. Warden, D. B., 136. Ware, N. A., 140. Warren, J., 44. Warville, Brissot de, quoted, 131. Water competition with railways. 249. Washburn, 186n. Watt, quoted, 13. Wayland, F., 139. Webbe, 124. Weber, von, cited, 250n., 252n. Webster, P., 127. Weitling, W., 15. Wells, D. A., 146. Westlake, cited, 53n. Whateley, Archbishop, 39, 87. Whitaker, A. C., 157. White, A. D., 149. White, H., 146. Whitmore, W., cited, 48n. Wicker, cited, 146n. Wieser, F. V., 115. Wilcox, W. T., 154. Willis, H. P., 156. Wilson, M., 139. Windom committee, 251n. Wisconsin granger laws, 200. Wise, J., 123. Witherspoon, J., 129. Wolcott, O., 131. Wollman, L., 157. Woodmanston, 125. Working Tailors' Association, 45. Workingmen's movement in the United States, 142. Wright, quoted, 225. Wright, P., 143. Wyatt, 10.

Xenophon, 2.

Young, A., 66. Young, A. A., 157.

Zeitgeist, the, 17.